

PD-ABP-487

Program Assistance Initial Proposal

FACESHEET

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8. PROPOSED BUDGET AID FUNDS (\$000)							
A. APPRO- PRIATION		B. PRIMARY PURPOSE CODE		C. PRIMARY TECH. CODE 1. Grant 2. Loan		D. 1ST FY 92 1. Grant 2. Loan	
						E. LIFE OF PROJECT 1. Grant 2. Loan	
(1) DFA *						\$108,000	
(2)							
(3)							
(4)							
TOTAL LS				\$13,588		\$108,000	
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B. Amount							
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* Purpose codes to be completed prior to PAAD preparation

A

Agency for International Development
Washington, D.C. 20523

SA-18
Rm 609.
PAIP

NOTICE OF MEETING

January 8, 1992

UGANDA

TO : See Distribution
FROM : AFR/EA, George Lewis *GL*
SUBJECT : Support for Ugandan Primary Education Reform (617-0131/0132) - Program Assistance Initial Proposal

The Project Committee will meet to review the attached PAIP which proposes a \$108.0 million comprehensive primary education reform program for Uganda over a seven-year LOP. The program will focus on improving quality and access to education through a combination of project and non-project assistance. The program will provide intensive teacher training and school grants in at least ten of the country's most needy districts and will benefit some forty percent of the country's school-age children. If the PAIP is approved, USAID/Kampala requests that AID/W delegate authority to approve and authorize the program to the Mission. Individuals not listed as Project Committee members who wish to attend and participate in the review are welcome to do so.

ISSUES

Date: January 13, 1992
Time: 10:00 - 12:00
Place: Room 3676, NS

If a second session is required to complete the review, it will occur:

Date: January 15, 1992
Time: 10:00 - 12:00
Place: Room 3676, NS

Attachment: SUPER PAIP (617-0131/0132)

Distribution:
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B

MEMORANDUM

DATE: 14 December 1991

TO: Richard Cobb, DAA/AFR

FROM: Keith Sherper, ^{Keith}Director, USAID/Uganda

SUBJECT: Support for Ugandan Primary Education Reform (617-0131)
Program Assistance Initial Proposal

USAID/Uganda is pleased to submit the attached PAIP describing a comprehensive primary education reform program for Uganda. The program will focus on improving quality and access to education through a combination of project and non-project assistance. Several of the interventions will have nationwide impact. Intensive teacher training and school grants will be concentrated in ten of the country's most needy districts and benefit some forty percent of the country's school-age children.

This PAIP is the result of over 18 months of in-depth analysis, sector assessment, management studies and ethnographies. It has been carefully coordinated with the Ministry of Education and the World Bank, who plan a significant intervention in primary education. It is consistent with the Mission's draft Country Program Strategic Plan, as well as Bureau guidance on basic education and NPA activities. The program as presented represents a manageable intervention which will have a profound effect on the delivery of social services and on improving human resource capacity in Uganda.

We look forward to AID/Washington review of the PAIP and welcome feedback on our approach and analyses. Assuming acceptance of the PAIP as presented, we request that the Bureau delegate the authority to approve the PAAD, and authorize the program, to the Mission.

SUPPORT FOR UGANDAN PRIMARY EDUCATION REFORM

PROGRAM ASSISTANCE INITIAL PROPOSAL

(617-0131)

December 13, 1991

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EXECUTIVE SUMMARY

Background

Uganda, a Sub-Saharan African country blessed with fertile soil, abundant rainfall, and people who have demonstrated a capacity to produce and thrive, has been devastated by 15 years of political turmoil and economic decay. This has resulted in a degradation of social services. The current education budget, at 13 percent of a national budget that stands at a scant ten-plus percent of GDP, is abysmally inadequate to rebuild, furnish, and supply schools, and to retrain and support teachers. Teachers receive from the government far less income than they need to survive, and most of the financial burden for the education of children and youth is thus carried by parents, not the government. This effectively means that children from poorer families have less access to primary education. Many teachers lack not only basic skills, but also the ability to teach, and few have the benefit of textbooks or other instructional materials.

Fortunately, Uganda is distinguished by a tradition of strong community support for schools and an older generation of well-trained and dedicated educators. Since the mid-1980s, with the re-emergence of political stability, the government has begun to systematically repair its educational system. An Educational Policy Review Commission studied thoroughly the country's educational needs. Its recommendations form a solid basis for systematic reform. The Cabinet is on the verge of authorizing major policies and programs that lay the groundwork for the rehabilitation of the sector. New curricula have been drafted reflecting the needs and interests of learners, and a five-year investment plan for the education sector has been presented to donors.

While access to primary school is far from universal -- only about 50 percent of children are in primary school -- there is a clear need to improve the quality of existing schools before opening more schools. Inequities must also be addressed: education is much less available to children in disadvantaged regions of the country, to rural children, and to girls.

Goal and purposes

The goal of this USAID education program is thus to improve the quality of, and reduce inequities in, the primary education system. Its purposes are to:

Improve the quality of classroom instruction to enhance student acquisition of basic skills;

Improve the efficiency of local level education

administration, management, and accountability; and

Reduce inequities in access to and persistence in primary education.

The program

The \$108 million, seven-year program consists of five major program components. Both nonproject and project assistance are deemed critical to encouraging the government to undertake key primary education policy reforms and supporting their implementation.

The first component is to encourage the government to increase teachers' salaries. Only with a concerted renewal of the recognition afforded teachers in the past will quality improvements be sustained.

The second component is the decentralized, inservice teacher and management training (the IMISS program) to be implemented initially in ten districts as the vehicle for improvements in the quality of classroom instruction and school management.

The third component concerns instructional materials. The dearth of textbooks, teachers' guides and other materials would make any improved teaching methods resulting from the IMISS initiative an unfair challenge to teachers. The program will assist the government to rectify the paucity of instructional materials nationwide.

The fourth component is grants to schools within the IMISS districts, to develop the resource around which to catalyze further community support for primary education and to improve efficiency (through the IMISS network) in the management of primary schools.

The final component is intended to encourage the government to focus policy on overcoming the disparity in girls' access to, and rates of persistence in, primary education. The program will assist the government to define and fund appropriate national policies favoring girls' primary school enrollment.

The program will result in a stronger, decentralized primary-school system, with an improved capacity at the district and school levels to provide basic skills. Teachers' salaries, textbooks, and girls' education will be dealt with at a national level, while teacher training and school grants will be limited to certain districts. By the end of the program, 10 of 34 primary-school districts will have strong support from district-level service centers. The number of competent teachers will be increased and stabilized, as one-half of the teachers in the country will receive effective in-service training. Instructional materials--textbooks and supplementary materials--will be available and put to better use nationwide, in

primary school grades, in the four major subjects (English, math, science, and social studies), on a 3:1 student-to-book ratio. An efficient resource-distribution and accounting system will be in place in selected districts, with district- and school-level personnel better able to manage fiscal, material, and human resources. The teaching profession will recoup recognition, and teachers will be more adequately rewarded for good work. As a result, nearly one million children in primary school (40% of end-program enrollment) will receive a better education than they have for nearly two decades. In addition, the imbalance between girls and boys who stay in primary school will be reduced, and the inequitable distribution of government resources to urban and rural -- and otherwise disadvantaged -- schools will be partially improved.

Funding

The program is designed to achieve its purposes through combined inputs of nonproject assistance (NPA), technical assistance, and the provision of equipment and supplies, totalling US\$108 million over a seven-year period beginning in FY 1992.

Nonproject Assistance

US\$90 million will be provided in the form of nonproject assistance related to specific government policy reform measures that will affect the quality and equity of primary education. A key policy change will be to increase (absolutely and relatively) not only resources going to the education budget in general, but also resources within that budget going to primary education. Adjunct to this will be real increases in teachers' salaries. Another key policy change will be to improve the quality of primary teachers and classroom instruction. A third key policy change will be to increase the access of females to a primary education, reducing the existing gender gap. Nonproject assistance (NPA) is intended to encourage the government to implement policy changes by conditioning disbursement on performance in the following five program areas:

- (1) Increase teachers' salaries toward a living wage;
- (2) Increase per pupil expenditures on instructional material;
- (3) Staff and strengthen Education Service Centers (former teacher training colleges);
- (4) Provide block grants to selected schools; and
- (5) Increase the persistence of girls in primary education.

Project Assistance

While nonproject assistance helps to create the policy climate for educational reform at the primary level, project assistance will help the ministry manage USAID inputs and implement the training components of the program. The project component of the program will provide US\$18 million for the following kinds of technical assistance, equipment, and supplies:

Forty-two person/years of U.S. technical assistance: seven people working during six years, five on the district level in Education Service Centers, and two in the Project Implementation Unit (PIU). The technical assistance team will be responsible for working with Ugandan counterparts and local technical assistants to design and implement the IMISS program. The team will include specialists in curriculum, student assessment and examinations development, teacher training methods, school management, materials development, and project monitoring and evaluation.

Forty-two person/years of local technical assistance: seven people working during six years at the district level in Education Service Centers, and one personal services contractor working in USAID/Uganda.

Short-term technical assistance and training to supplement the long-term specialists described above. This will include the technical assistance needed to monitor and evaluate the program, and to help in specific teacher-training, management, and materials-development functions.

Teaching aids and equipment and materials for use on the district level in producing student handouts and other pedagogical materials. These materials will be distributed directly by staff in the PIU to districts, and through them to primary schools.

Implementation

In an effort to reach classrooms directly with competent teachers and effective instructional materials, a project component of the program will be implemented largely at the district level. In cooperation with the Ministry of Education and the World Bank, USAID will work within the Integrated Management and Instructional Support System (IMISS) program already approved by the ministry. The IMISS program will replace faltering primary teacher training colleges (TTCs) with Education Service Centers (ESCs) that support teachers and other school personnel already in place.

Through modular courses held at the centers and outreach training courses in the schools, ESCs will offer in-service teacher training, management training for head teachers and school management committees, training for inspectors and district level education officers, and training for tutors in teacher-training

centers. The ESCs will also produce instructional materials for schools in the districts they serve.

The program will develop ESCs in ten of the 34 districts in the country. The IMISS program will form the hub of USAID's project assistance.

The project component of the program will operate mainly out of the Education Service Centers because their proximity to schools provides the means to deliver training and other resources through decentralized structures, getting them to schools more directly than by channelling them through the central ministry offices.

Government and other donor coordination

The timing and nature of the program will enable USAID to influence strongly the government's priorities in reforming its education sector. The government has a broad list of goals and potential programs, but few clear priorities. The only other donor that has had negotiations with the ministry on primary education is the World Bank. The World Bank, which has given substantial assistance to the ministry in developing the IMISS project, will finance technical assistance to central ministry offices responsible for planning and management, curriculum development, and examinations and testing. The Bank will also finance the building of schools and in-service training centers: approximately 4,200 classrooms in schools and colleges.

USAID and World Bank support will be complementary, but if the World Bank program does not materialize, the USAID program can be implemented independently, albeit, with more difficulty in the absence of an improved physical infrastructure.

The program appears to be feasible and sustainable under the USAID's projections for Uganda's economic growth into the next century. It is technically sound (based on a tested USAID education model), and its initial effects will be relatively immediate and will be implemented on a local level. Although the Ministry of Education does not function well on the district level, the program specifically addresses institutional weaknesses, and provides funds and training to improve the managerial capacity of schools and district offices. From a social and political perspective, the program will benefit 40% of Uganda's school children and respond to clearly expressed needs of parents for better schools. No significant political or social opposition is visible.

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MACROECONOMIC CONTEXT

The Ugandan Economy and Its Decline

Today Uganda ranks 15th among the 42 poorest nations in Africa in terms of gross domestic product (GDP) per capita (World Bank 1990). This was not always so¹.

When Uganda gained independence in 1962, it was well-placed to become one of the economic leaders of the African community. Its GDP per capita was one of the highest in Sub-Saharan Africa, and economic growth averaged 6 percent a year from 1963 to 1970. A high rate of domestic savings--averaging 15 percent--allowed the economy to finance internal investments, resulting in an enviable transport and administrative infrastructure, which in turn enabled Uganda to be a net exporter of food. Consequently, it experienced no serious balance of payment problems. A dynamic and diversified manufacturing sector was close to rivaling agriculture in contributions to the monetary sector. The government was able to invest in services, such as education and health, and finance development projects. Productivity was high compared with the growth of the labor force, leading to improvement in overall employment: the public sector grew by 46 percent and the private sector by 24 percent from 1966 to 1971.

From 1970, however, Uganda was racked by political and economic turmoil as Idi Amin took power. A succession of internal conflicts and political upheavals had a prolonged and devastating effect on the economic, social, and civil life of the country. As state structures collapsed, the government became less able to run the country. Professional and technical skills were lost as people were killed or fled the country. With the expulsion of the Asian community, a wide range of productive enterprises in the modern sector was closed down. The chief casualty was the manufacturing sector, which was destroyed with the loss of tens of thousands of jobs. The once-diversified export economy became dependent on coffee for 95 percent of export earnings, and agricultural exports declined to negligible levels. The share of agriculture in the non-monetary sector increased, indicating the economy's regression into subsistence agriculture (46 percent of GDP).

¹This section draws heavily, and in some cases explicitly, on: J. de Coninck, "Uganda Country Study: Evaluating the Impact of NGOs in Poverty Alleviation", Overseas Development Institute, London, April, 1991; the World Bank's Structural Adjustment Credit Report and the Staff Appraisal Report on Uganda's Primary Education Development Project, and the government's Report of the National Manpower Survey 1989.

Over the next 16 years, GDP experienced a drastic decline: in 1986, GNP was below the level reached in 1968 and per capita GDP was 35 percent lower than it had been at independence, a quarter of a century earlier. In an era of dramatic educational expansion in Africa, Uganda's primary and secondary school enrollments were lower in the mid-1980s than in the mid-1960s. The fiscal deficit increased to 6 percent of GDP by 1984 (US\$1.2 billion), revenue collection declined, prices escalated vertiginously, and galloping inflation led to sharply reduced real wages. The economy was in ruins, the social structure devastated, and the civil service unable to administer the country. Years of war displaced hundreds of thousands of people and, coupled with the emerging AIDS pandemic, left growing numbers of orphans and the elderly with no support.

With the installation of the popular National Resistance Movement (NRM) government in 1986, peace and security have been restored to most parts of the country. Since then, the economy has experienced the most rapid and sustained growth of the last twenty years. Bilateral and multilateral donors have returned to Uganda, and the International Monetary Fund (IMF) and World Bank have become the country's major creditors.

Economic Reform and Structural Adjustment

In 1987, the NRM government launched its Economic Recovery Program (ERP), aimed at stabilizing and rationalizing the economy by replacing administrative controls with market prices, exercising monetary and fiscal restraints to reduce inflation and debt imbalance, and rebuilding infrastructure in the agricultural and manufacturing sectors. Despite economic shocks from the precipitous fall of world coffee prices and decline in exports of cotton and tea, some progress is evident already. In stark contrast with the 1 percent annual rate of growth in GDP between 1980 and 1986, GDP growth averaged an impressive 6.6 percent growth rate between 1987 and 1990, with per capita GDP rising an average of 3.6 percent a year. In 1990, real per capita income experienced its first rise in seven years. Much of this growth has come from the recovery of the depressed agriculture sector. Inflation, running at 223 percent in 1987, was reduced to 23 percent in 1991 through both regular adjustment of the exchange rate and an inflow of foreign exchange. Improved tax administration and control of government expenditure has led to revenues of 8 percent of GDP, with an expected increase to 12 percent in 1991 and 1992.

Prospects for Growth

Despite the improving economic climate, there remain serious structural problems in the economy that can impede Uganda's economic recovery. Restoration of internal financial stability and balance of payments viability has been greatly frustrated by

the collapse of the international price of coffee and the continued strong increases in spending on defence and internal security. Almost total dependence on coffee for exports, a high and rising level of dependence on imported oil, the existence of an inefficient parastatal structure, and the dominance of external finance to fund both budgetary and capital expenditure threaten economic growth.

Although depressed revenues and policies of fiscal constraint have kept government expenditures low (14 percent in 1989) in comparison with the African average, government spending exceeds revenue by 5 to 6 percent and, even with restructuring, the current account imbalance is likely to increase initially (projections indicate as much as 13 percent in 1991/92). Despite previous rescheduling of foreign debt, severe external payment pressure has led to a high debt service ratio of 66 percent of export of goods and services. The balance of payments remains precarious and the poor terms of trade for Uganda's principal export do little to alleviate the burden.

Recent economic growth is primarily due to a major injection of foreign assistance and is based on the rehabilitation and reclamation of existing business and industry. Domestic savings--at 5 percent of GDP--are insufficient to support necessary investment in new productive areas, and private foreign investment is insignificant. Although rockbottom world market prices for coffee have stimulated some diversification in the agriculture sector, so far little progress has been made. Agriculture remains the engine for economic growth, however; and unlike other Sub-Saharan countries, Uganda's fertile soil and year-round rainfall allow it to continue to feed itself. Over the next several years, GDP growth has been estimated at 5 percent, based on the modest recovery of the coffee export market and assistance in meeting import requirements. Key is the continuing support and goodwill of the donor community.

Donor Support for Adjustment

The ERP has been supported by two Economic Recovery Credits (ERC I and II) from IDA, two arrangements under the Structural Adjustment Facility (SAF), two arrangements under the Enhanced Structural Adjustment Facility (ESAF) from the IMF, and by other multinational and bilateral donors.

Recognizing that the sustainability of the Ugandan reform agenda remains critically dependent on adequate external financing, a proposed Structural Adjustment Credit of US\$92 million has two objectives: 1) to remove constraints to private sector development, and 2) to improve the effectiveness of the government. Its program includes further liberalization of the trade regime and elimination of subsidies to importers, creation of an investment authority to promote investment, restitution of

properties expropriated by the Amin regime, improved government revenue collection, reallocation of public expenditure to favor programs such as primary education, and support of major civil service reform. Buttressing the IDA program, the British Overseas Development Administration (ODA), USAID, the European Community (EC) and Switzerland will support a newly instituted foreign exchange auction. In addition, other donors have expressed their intention to provide balance-of-payments support.

Economic Justification for Sectoral Reform

There is little evidence that the benefits of macroeconomic growth are "trickling down" to the country's poorest. Life quality indicators (see Appendix 3, Table 1) show a marked downturn over a 20-year period, consistent with reduced state spending. Education has suffered particularly. The government recently acknowledged "that there has been a considerable decline in the quality of education²." The result is insufficient educated and skilled manpower to achieve governmental objectives of rehabilitating the industrial and agricultural sectors. Even within the formal sector, the educational profile of employees is low: over a third are estimated to have less than secondary education qualifications. Within the informal sector--two and one-half times the size of formal sector employment--a recent manpower survey found that entrepreneurs lacked basic numeracy skills in order to undertake cost-pricing and simple bookkeeping tasks. The agriculture sector, employing 40 percent of the labor force, is the linchpin in the government's economic growth strategy. Yet, extrapolating from the urban-rural breakdown of schooling distribution, it is least likely to have workers with basic education. Education is also essential to alleviate the growing income disparities and in order to fuel domestic savings and demand, essential to economic growth.

In short, the education sector--notably primary education--has received insufficient resources both to provide a basic education to the majority of Uganda's children and to ensure that education is of adequate quality to increase the country's human capital resource base. By the mid-1980s, real state expenditure on education was less than one third the level reached in the late 1970s. Despite an apparent high demand for primary education (as evidenced by burgeoning subgrade private schools) and the doubling of primary school enrollments, primary school gross enrollment ratios (the percent of school-age children in school) have stagnated at 70 percent over the past decade. The funding shortage has resulted in a critically underpaid, undertrained and alienated teaching force, non-existent school materials and inadequate infrastructure. A major problem is the cost of schooling: parents bear the preponderance (up to 90 percent) of

² de Coninck, 1991

the funding burden. The fees and ancillary charges are often beyond the parental ability to pay. Student access to quality education has become a function of parental income level. The consequences for building an educated manpower base are serious: 50 percent of children are not enrolled in school and there is evidence of substantial gender discrimination in school access and persistence. Yet, the consequences of doing nothing are even more severe: worldwide evidence underscores the link between an educated population and macro-economic growth. Many studies of farm productivity, family enterprises and wage earners have demonstrated the positive effect of education on output and productivity. In terms of aggregate real output, a recent study found that an increase of one year in average years of education may lead to a three percent rise in GDP³.

Although not sufficient to resolve all the problems of the primary education system in Uganda, reallocation of resources to both the overall education budget and the primary education budget in particular is critical to address issues of access, quality, and equity and, ultimately, to address Uganda's manpower needs to fuel its economic growth. An educated manpower base is essential to harness Uganda's natural resources for improving the quality of life and building an independent, integrated and self-sustaining national economy. Restructuring of the educational system, whose expenditures are now extremely low, will require infusions of capital to rebuild the infrastructure, reform the pay scale and provide instructional materials. Indications are that government budgetary projections are insufficient to cover the scope of reform required.

³ World Development Report 1990: Poverty, The World Bank, Oxford University Press, 1990. The negligible effect in Sub-Saharan Africa suggests that education must reach threshold levels before positive returns to education set in. This argues strongly for increased investment in primary education to improve quality, expand access and increase efficiency.

THE EDUCATION SECTOR

While political turmoil and accompanying economic deterioration have not yet dampened the demand for education in Uganda, they have extracted a heavy toll on the quality of the education offered today in most schools. The cost paid by parents for the diminished learning in the classrooms has even put the demand for education in the balance. If the education sector is allowed to deteriorate further, recouping the value of education in parents' eyes is likely to make the task of educational regeneration even more difficult than it is today.

National Objectives

USAID's entry into the education sector is timely, for the Government of Uganda (GOU) is well on its way towards launching an educational reform. A draft White Paper on education, largely based on the findings of the Education Policy Review Commission (EPRC) of 1989, has been approved by Cabinet and is to be the focus of wider public discussions prior to a national conference on educational reform in the spring of 1992. The Ministry of Education has already presented a Five-Year Education Sector Investment Programme to donors for consideration.

The national objectives and goals of education can easily be gleaned from these documents. Education is viewed as a fundamental human right. It is seen as the means toward forging national unity and harmony and evolving grass-roots democratic institutions and practices as well as creating national wealth and self-reliance and promoting ethical values.

Among these broad aims of the system, four areas have been singled out for attention.

Democratization. The government aims to provide universal primary education (UPE) by the year 2003 and to locate schools within four kilometers of each school-age child. In addition the government wants to ensure greater access to education for girls, adults, the handicapped, and disadvantaged groups.

Vocationalization. Education is to be oriented to productive work, by making the curriculum more relevant and by introducing vocationally-oriented courses and community service schemes.

Decentralization. Greater devolution of responsibility from the central ministry to the district and local levels is envisaged, both to mobilize local resources and to increase efficiency.

Quality. Quality is to be improved by enhancing facilities,

making instructional materials more available, improving evaluation and examinations, and providing more effective teaching. Adequate remuneration of teachers is emphasized as one of the linchpins to quality improvement.

Description of the Education Sector⁴

Ugandan education is no longer the envy of its neighbors. At Independence in 1962, however, Uganda inherited a small, but highly organized system of education, which was recognized as one of the best in sub-Saharan Africa⁵. From the mid 1970s, this tradition of excellence has been in decline, largely due to political and civil disturbances and subsequent economic deterioration. Today, while continuing to function and provide minimal educational services, every sub-sector of the education system faces considerable difficulties.

Structure

The structure of the educational system has not changed since Independence and reflects its British heritage. Primary school has a seven-year cycle followed by a four-year lower secondary cycle (UCE, or O-level) and a two-year senior secondary cycle (UACE, or A-level). University education takes three to five years. The EPRC Report has recommended extending the primary cycle and reducing the lower secondary cycle by one year.

Primary Education. The growing number of primary schools in the face of turmoil is remarkable. Growth has occurred in an unplanned fashion, due almost entirely to the efforts of local communities. During the 1980s the number of primary schools doubled, numbering just under 9,000 by 1989, and the number of primary-school students also doubled, rising to over 2.5 million students. The increase in the number of untrained teachers, which helped to account for such a rapid expansion, gives a first indication of the deterioration in quality that occurred during this period. While the number of teachers more than doubled (to some 89,000 teachers), the percentage of untrained teachers in

⁴ Although certain data are available for 1990, the majority of data available were for 1989. However, it must be emphasized that the numbers reported are by no means fixed points. Although the results of the 1991 school census have not been reported, it is understood widely that numerous 'ghost' schools and 'ghost' teachers have been reported in previous data collections. Although one can take the figures reported here as the broad brush picture, they should not be interpreted as definitive.

⁵ This section draws heavily, and explicitly on "World Bank, Staff Appraisal Report, Uganda, Primary Education Development Project, October 10, 1991."

the teaching force rose from 35 percent in 1980 to 48 percent in 1989⁶.

Although the growth rate of primary school enrollments⁷ has exceeded the rate of growth of the school-age population, a large proportion of the primary-school-age cohort still receives no schooling. Gross enrollment ratios increased from about 50 percent in 1980 to about 70 percent in 1989. While net enrollment ratios are not known, it is estimated that in 1989 about half the school-age population was not in primary school. Of course, these averages mask the disparities across the country, and in some regions, the gross enrollment ratio shows that fewer than one quarter of 6-12 year-olds attend primary school. The drop-out rate in the lower grades is about 8 percent, probably due both to the financial burden on parents of keeping children in school and the futility felt by parents in continuing to send their children to ineffective schools.

Secondary Education. Growth at the secondary level has been even more marked than at primary, with the number of schools increasing nearly six-fold, (rising to 696 by 1989⁸), and the number of students growing by more than three and a half times their 1980 figure, rising to over a quarter of a million. The percent of untrained teachers at the secondary level increased during the 1980s from less than a fifth to more than a third of the teaching force. The gross enrollment ratio at secondary level is 10 percent of the secondary school-age population, though this average varies from 3 percent in some districts to 30 percent in others, and no doubt masks further sub-regional disparities. Drop-out rates are about 4 percent at the secondary level.

⁶ All figures are taken from Ministry of Education sources, the 1980 figures coming from the USAID Education Sector Review, the 1989 figures from a print-out from the Planning Unit of the ministry. The 1989 figures include private schools.

⁷ Over the period 1980-1989, the average growth rate of primary school enrollments was 7.8%, varying from 4.1% to 12.4% for individual years.

⁸ These figures include private schools together with government aided schools. In 1987 there were 515 government aided secondary schools, rising only to 522 by 1989, whereas the total number of secondary schools (private and government aided) rose to 696 over this two-year period.

Gender Disparities. Girls' persistence rate in primary school is lower than that of boys. Though the pattern of dropping out has not been researched sufficiently, it is evident that by the time girls start secondary school, they number about one-third of the total students, while their number in the first grade of primary school (P1), is about the same as that of boys. Of children entering primary school, the probability of a boy completing lower secondary school (S4) is twice that of a girl, and the probability of his continuing on to upper secondary is almost three times as high.

Teacher Education. The institutions of teacher training form a three-level hierarchy, each training teachers for one level of the educational system. At the top Makerere University and the Institute for Teacher Education at Kyambogo (ITEK) train teachers for upper-level secondary school and produce tutors for the two layers of teacher training institutions below them. According to 1990/91 enrollments, the two institutions together produce approximately 550 graduate teachers annually plus another 780 from their post-graduate diploma and Master's programs in education. Ten National Teachers' Colleges (NTCs) form the middle layer, training teachers for secondary schools. NTCs admit students who have completed their A-levels to a two-year program that produces over 2,000 graduates annually, according to 1990/91 statistics⁹. The Primary Teacher Training Colleges (TTCs), form the base of the teacher-training system, recruiting from O-level graduates and providing both pre-service and in-service training for primary school teachers. Their number increased rapidly during the 1980s, as new TTCs took over primary school buildings, but in 1989 the government decided to phase out 24 TTCs due to its inability to adequately finance them. In 1990 69 TTCs had an enrollment of 15,000¹⁰.

Female enrollment in teacher training institutions is skewed towards the lower levels, with TTCs having about 40 percent female enrollment, and NTCs, despite an increase in female representation, having only about 30 percent female enrollment in 1990/91. ITEK currently enrolls cohorts with 21 percent women in its Bachelor's programs and from 26 to 48 percent in its diploma courses. Makerere University cannot fill its women's quota (a breakdown by gender in its education courses was unavailable).

Infrastructure and Instructional Materials

An estimated 50 percent of all primary schools have no permanent classrooms. Many schools have little or no furniture. Secondary

⁹ Evans and Odaet, 1991

¹⁰ This includes those in the two-year pre-service as well as the in-service programs.

schools and teacher training institutes have similarly dilapidated and inadequate facilities.

Schools' physical deprivation is matched by a scarcity of instructional materials. It is estimated that only 15 percent of the total instructional materials required are supplied by government and community resources. Teachers' guides are out-of-date or non-existent. Most materials found in the classrooms are imported, purchased with scarce foreign exchange, as the once thriving local publishing and printing industry is nearly defunct. Because of the high cost of textbooks and the general reliance on parents to provide them, shortage of books and other instructional materials in the classroom is pervasive.

Management

The officially centralized management and administration of the education system operates like a dissected body whose organs, although programmed to carry out specific functions, can no longer perform them because the main arteries have been cut off. In spite of central, regional and district structures, the operation of schools has been *de facto* decentralized. The planning and statistics unit exists, but has limited data and capacity to plan. The inspectorate has its inspectors, but scarce means for them to visit schools. At the furthest-reaching points, the schools are in session (except for recently uncovered "ghost" schools), but management takes place by default rather than by design, and the motions of teaching take place, with little effect on learning.

In the turmoil of the last two decades, continued parental demand for education has kept the system alive, but it has survived only as the shell of what was once a vital institution, and some of its "organs" have mutated and assumed new functions. For instance, students are indeed sitting in classrooms and teachers are teaching them, but most observers have seen little education take place. School management committees, which, with their associated PTAs, have emerged as new local management structures, have been running the schools with no training in management or the requirements of effective pedagogy, and with as little as 10 percent of their resources coming from the central ministry. Teachers focus only on the Primary School Leaving Examination (PLE), which has also become disconnected from the curriculum and relevance to students' lives, so it is really an empty ticket to the next stage of "learning". The host of other, more semi-autonomous institutions, such as the Teaching Service Commission (TSC), the Uganda National Examination Board (UNEB), and the National Curriculum Development Centre (NCDC), all of which have also been starved of support, have similarly barely survived, carrying out few of their earlier, more wholesome functions.

CRITICAL PROBLEM AREAS AND CONSTRAINTS

The constraints on improving the education sector, particularly primary education, can be described in terms of three critical problem areas: inadequate public finance, the low quality of learning, and management and accountability.

Inadequate Public Finance

The root of the problems of the education sector must be traced to inadequate public finance - a binding constraint on the improvement of education. But though sufficient public finance is an essential starting point for educational reform, it is by no means the only requirement for restoring the learning that should be taking place in Ugandan schools.

Skewed Educational Investment. Inadequate finance underlies the sectoral problems in several ways. First, the skewed education budget, which devotes 20 times as much per pupil to the secondary subsector and 225 times as much per pupil to the tertiary subsector as to the primary subsector, in effect affords a subsidy by the poor to the rich, as those students whose families are able to keep them in school through secondary school reap the benefit of 'free' higher education provided by the state at university. This pattern, although historical in nature, has resulted in the government's under-investing in primary education and overvaluing university education, together with its associated effects on families' own values. The government recognizes the importance of investing in primary education, however, and as part of the conditionality of the World Bank's Structural Adjustment Credit (SAC) facility, has agreed to restructure its educational expenditure in favor of primary education.

Lack of Professionalism and Prestige of Teaching Force. Probably the most dire effect on the education sector of under-investment is the undermining of the professionalism of the teaching force and the prestige and values which used to reinforce a teacher's role in society, and in particular, in the local community. Low civil service salaries have also undermined the professionalism of those who manage and administer the educational system in central and regional offices as well. Because civil service salaries have been so significantly lower than a living wage¹¹, teachers and other civil servants cannot eke out a living from their salaries and have had to take on other work. Recruitment standards, which permit an increasing proportion of unqualified secondary school "graduates" to become

¹¹ The report of the Commission of Inquiry into the civil service acknowledged that civil service salaries constituted about 1% of appropriate wage levels.

teachers, has further reinforced this lack of professionalism.

This has immediate implications for the quality of their teaching. Teachers are not on the job during school hours; they earn extra money by coaching students for exams; they do not have time to prepare for lessons, to correct homework, or to prepare teaching aids.

Parental Financial Burden: Scarcity of Instructional Materials, Poor Physical Infrastructure, Disparities in Schools and in Access to Education. Because the central government gives little to schools, parents are forced to finance primary schooling for their children. It appears that they are pressed to the limit of--or often even beyond--their capacity to invest. This, of course, results in disparities among schools that reflect the disparities among the different communities that support them, not to mention the lack of access to education for those from the most disadvantaged families. The scarcity of instructional materials is also related to parents' inability to finance all the costs of primary education. Poor school buildings, lacking furniture and other equipment further lowers school morale and the accompanying incentives to better, and more effective teaching.

Adequate public finance for primary education would go a long way toward alleviating some of these major problems in the educational sector today. It would provide the environment in which sustainable change could occur, by providing the conditions of service necessary to restore the professionalism and prestige of the teaching force, and sufficient instructional materials and physical infrastructure to be the core of educational reform.

The Low Quality of Learning

The origins of the low quality of learning taking place in Ugandan classrooms today are systemic. Given their limited training, the lack of support they receive on the job, the lack of instructional materials available, and the orientation of the system toward the PLE, teachers have little alternative but to parody teaching. These constraints to effective teaching can be tackled separately, but the presence of any one of them reduces the likelihood that real learning will take place in the classroom.

Unmotivated and Demoralized Teachers¹². Recruitment into the teaching profession no longer appeals to the idealism of committed youth. Instead of offering an attractive and rewarding career, as it used to in Uganda, the teaching profession has become the dumping ground for those who fail to make it into more productive and more lucrative occupations. This is true for the profession as a whole, but increasingly true, the lower down in the teacher training pyramid one goes. Gender disparities are also reflected in this hierarchy, with the TTCs having substantially higher proportions of female recruits than the NTCs and other, higher levels of training institutions. Newly recruited teachers are the 'failures' of the formal school system, and teaching is seen merely as a stepping stone to other jobs.

Because teaching has become a last choice option for those recruited, the requirements for entrance into a teacher training college have also slipped, although one must pass at least four courses, including English. TTCs have had to accept candidates without such credentials. Yet these colleges have neither the physical, nor the human capital to provide appropriate instruction. Syllabi in use reflect none of the newer approaches to primary education, such as basic skills, practical skills, and problem-solving skills, envisaged in the draft White Paper on education. Nor is there a curriculum appropriate to the current Grade III recruits¹³.

Inadequate Pedagogical Support. Whether as Grade III graduates of TTCs or as completely untrained teachers, the current teaching force receives little if any support from the Ministry's central, regional, or district school levels. Inspectors cannot offer pedagogical support, as they have limited funds, limited transportation, and limited personnel. Head teachers manage schools bereft of central support, having to generate the majority of their funds.

Irrelevant Examination System. Add to these factors the inappropriate Primary-School Leaving Exam (PLE) which bears little if any relation to the curriculum or what students need to learn. The role of the PLE as a constraint to quality learning is important to understand. First of all, with the exception of science and health education, the primary school syllabus is still the same as that designed in 1967, with some minor revisions. Further, the lack of complementary materials, such as

¹² This section draws heavily, and at times explicitly, on Evans and Odaet, 1991.

¹³ The curriculum used for the older Grade II qualification which recruited entrants after P7, rather than after O-level, as at present, is still in use.

teachers' guides, together with the lack of textbooks appropriate even to the existing curriculum, no less the redefined educational goals expressed in the EPRC, make the PLE the only guidepost for teachers, particularly the untrained, who have no other materials on which to base their classes. As a result, previous years' PLE papers are a teacher's only guide.

Secondly, amenability to assessment becomes the driving force behind what is taught. The result is rote memorization, with much copying from the blackboards. Instead of teaching basic numeracy and literacy and problem-solving skills, teachers perform according to an extremely deficient notion of education which is the norm in most schools.

This new tradition of so-called "learning" is multi-faceted. Changing only one of the constituent factors will do little to alter the pattern. For example, providing textbooks without teacher training will not change the classroom experience. Training head teachers in more supportive roles without providing instructional materials will still leave teachers handicapped. The removal of the constraints to learning requires an integrated approach which is directed to each facet of the problem.

Limited Management and Accountability

The School and the District Level. Children are not being educated in Ugandan schools, not only because teachers are not equipped to teach, but also because the support system for teachers and schools has broken down. To continue the previous analogy, in the dissected body, some of the separate organs have truly become individual entities, with little life blood connecting them to the whole. Structures such as the school management committees appear to have too much responsibility and too little training for the jobs they are performing. The same can be said, in particular, of the head teachers.

The de facto decentralization which has occurred in the absence of central management offers an opportunity to reinforce, rather than reject the new structures, and to support them so that they function efficiently and effectively. As a whole generation has not known educational excellence, and has been unable to depend on the provision of educational services by centralized structures, the opportunity arises to help local communities manage the schools that they have built and supported.

Management of the educational system at the school and district levels is abysmally weak. Systems for record-keeping and accounting are inadequate, leading to misallocation of funds, salary payments to "ghost" teachers and a general lack of fiscal accountability. Inadequate remuneration of those in responsible positions has led to rife corruption, affecting head teachers, school management committees, PTAs, district education officers,

as well as the district level employees of the Ministry of Local Government, (the District Administrators (DA) and District Executive Secretaries (DES) who have administrative responsibilities parallel to the professional responsibilities of the Ministry of Education personnel).

The Central Ministry of Education. Although historically parents have assumed some financial responsibility for their children's primary and secondary education, in the past decade they have also had to take on an increasing role in managing the bare provision of resources in their primary schools. This has left the central Ministry of Education peculiarly detached from what was once its role in administering the schools which it has authorized to operate, and at the same time in search of a new role in the context of de facto decentralization which has not become de jure.

The lack of efficient management and accountability in the central ministry, just like that at the district and school level, will also impede educational reform unless it is corrected. The central ministry must begin to supervise the whole system and rectify the regional, economic, and gender disparities that exist. Decentralization in the absence of some form of regulatory and supervisory role on the part of the central ministry, leaves individual schools and districts dependent on the local support they can muster, together with the inequity of different local circumstances. The Northern region in Uganda, for instance, requires special treatment, as with the case of other, especially disadvantaged groups such as orphans, the disabled, girls--who are disadvantaged because of social norms--and the less well-off.

The inadequacy of the central ministry's planning and statistics functions makes the fulfillment of such a regulatory role well nigh impossible. In the absence of timely data which help in the analysis of disparities among regions, the ministry cannot direct attention to needy areas or groups.

THE GOVERNMENT'S PROGRAM AND OTHER DONORS' AGENDAS

The Government's Program

The Ministry of Education has been working since 1987 toward a systematic reform of its education system at all levels. With minimal influence from donors, the Education Policy Review Commission report was issued in 1989. Its recommendations for reformed policies and curricula became the basis for the government's White Paper, which, by November 1991, was in the final stages of adoption by Parliament. Following the direction of the White Paper, the ministry is reforming the curricula at all levels, and providing free universal primary education by the year 2003. The approval of the new curricula by the ministry is expected to be imminent.

The ministry has issued a Uganda Five-Year Education Sector Investment Programme, 1991/92 - 1996/97, which presents cost estimates for a long list of potential donor investments related to primary education¹⁴. This was presented to donors in July 1991. First priority is given to assistance in constructing new classrooms and rehabilitating existing ones. Beyond this, priorities are less clear; the ministry's interest in assistance ranges across broad areas, including curriculum and examination reform, textbooks and other instructional materials, interactive radio, teacher training, management training and management-capacity building, and programs for low-access and disadvantaged groups.

Discussions between ministry representatives and USAID consultant teams have confirmed that the ministry welcomes assistance in primary education, and that it recognizes the need to strengthen its teaching force. The ministry has clearly stated its own commitment to reallocating resources to the primary subsector and to increasing salaries and allowances to teachers. Already agreed to in the Structural Adjustment Credit is a shift in resources from the military to education, and, within education, from secondary and tertiary level to the primary levels.

Donors

Because of the precarious situation in the country during the 1970s and much of the 1980s, no sizeable donor programs of any duration could be found in the primary-education subsector. As the political situation in Uganda appears to stabilize, donors have begun to return to the country and to influence the

¹⁴As the mission's program goal is limited to primary education, this section will not discuss donors in other subsectors.

direction of its economic and social development. The primary-education subsector has attracted some donors, though most of their programs are in the initial phase. The World Bank has played a prominent role, and has helped the Ministry of Education develop its five-year investment plan.

Prior to the presentation of that plan to donors in July 1991, several donor projects in primary school were in place or on the drawing board.

The World Bank, through its Third and Fourth Education Projects, has provided textbooks, instructional materials and equipment, and journals to about 8700 primary schools. The recent investigation by USAID's management audit team revealed that while these textbooks have been distributed to schools, many are still sitting in local warehouses, getting little or no use by students. The current project is also supporting the inspectorate; a technical expert is now completing two years of service in the ministry's central inspectorate office.

The Fifth IDA project is discussed in more detail in the subsequent section on the USAID program, as USAID is proposing to collaborate closely with IDA in implementing their respective projects.

IDA's Program for the Alleviation of Poverty and the Social Costs of Adjustment (PAPSCA) includes a Primary Education Emergency Improvement Program budgeted at US\$12 million. It will rehabilitate or build classrooms.

Other PAPSCA programs will pay US\$3.2 million in school fees for AIDS orphans and children of war widows, and will conduct a study on access to education for "the poor."

DANIDA provides complementary assistance to that of IDA in the form of US\$4.5 million worth of non-textbook educational materials in the 12 targeted PAPSCA districts and a training program in special education for teachers of the handicapped.

UNICEF has financed a new health education syllabus for Ugandan primary schools, but we have no information on its dissemination and use.

UNESCO is implementing a UNDP-funded project, Basic Education for National Development (BEND), which is an experiment in using teacher training colleges as centers for producing changes in curriculum, providing in-service teacher training, and initiating community-centered vocational training (crop production, weaving, and so on).

The European Community (EC) is giving 1 million ECUs to a self-help school construction project in the West Nile region.

The British Overseas Development Administration (ODA) funds a distance-education project called MITEP for in-service teacher upgrading in selected schools. The project is implemented by Action Aid. The ODA is also assisting the Science and Technology Equipment Production Unit's (STEPU) Mobile Unit to repair science equipment and train teachers in its use. This is a secondary-school level project with an anticipated extension into primary schools.

The Canadian Organization for Development Education (CODE) has donated paper that will be used to print copies of the program syllabus for all schools.

U.S. Peace Corps Volunteers and British VSOs are becoming active in the education sector, the former in higher level technical training institutes; VSOs have been advised to get involved in primary teacher training.

The African Development Bank will assist the Ministry's Planning and Statistics Unit.

Each of these initiatives on the primary level, particularly MITEP and BEND, has some potential interface with USAID's proposed program, and needs to be looked at more closely when the program is being fully developed.

Identification of Potential Problems or Gaps

The ministry's dire need for assistance in the entire education sector minimizes the risk of overlap between and duplication among donor programs. More likely is that, even with significantly increased donor assistance, gaps will still exist in the ministry's ability to provide adequate education services. Indeed, the ministry's resources are so scarce, that it is troublesome to contemplate reallocating resources among programs--the programs from which funds are taken away might barely be able to exist.

Nonetheless, the ministry recognizes the discrepancies between its budgets for secondary and higher and its budget for primary education, and it appears willing to cooperate with donors in focusing on the primary sub-sector. Its goal of universal primary education will necessitate a shift in resources to the primary sub-sector.

Within that sub-sector, the ministry's coordination of donor assistance has begun. The vehicle for that coordination is the World Bank's investment, centered on an Integrated Management and

Instructional System Support (IMISS), which is described in detail in the next section and in Appendix V. This program represents a systemic approach to rebuilding primary education, and provides a solid rationale for support from other donors. Fifty percent of World Bank assistance is scheduled for classroom construction and rehabilitation.

Other donors, including USAID, thus have an excellent opportunity to step into a coordinated primary-sector program with the kinds of technical and other assistance in areas in which they have a comparative advantage.

Areas for potential shortfalls and possible problems in the educational reform program occur on three different levels: (1) within the IMISS program, (2) in the ministry's five-year investment plan, and (3) at the global level in which the overall reform effort will take place.

(1) Gaps in the IMISS Program

Teacher Training: A central feature of the Bank's Education Sector Development Project is the transformation of Primary Teacher Training Colleges (TTCs) into district-level Educational Service Centers (ESCs) responsible for teacher training and school support. Cost constraints have reduced World Bank support to ten centers (with two of these being funded under IDA 4). Furthermore, the government target in the five-year investment plan calls for the eventual rehabilitation of 34 TTCs into ESCs, indicating an even wider gap.

Classroom Construction: In conjunction with the IMISS program, the Bank will construct and rehabilitate 4,200 classrooms in teacher-training colleges and primary schools. The government has identified 6,000 classrooms as an initial priority, leaving a shortfall of 1,800 classrooms.

Textbooks, Teacher Guides and Material Provisions: The Bank has proposed to provide textbooks and teacher guides in English, mathematics, science, and social studies for primary grades 1 through 4 on a 1:3 (book-student) basis for the entire country. (The USAID program is prepared to take over this component; see the discussion in the following section.) This leaves two obvious gaps: (1) the grade 1 through grade 4 students who will not get their own books, and (2) the students and teachers in grades 5 through 7, who are not targeted for any textbooks or materials assistance.

(2) The Government's Five-Year Investment Plan

Teacher Training Colleges: Though there are now 66 TTCs, the ministry will consolidate them into 34. All need

physical renovation, new equipment, and learning materials. Although the IMISS program will develop model teacher training programs in ten centers, it can not provide for immediate support of the remaining 24 centers, which currently provide a substandard teacher education but will continue to produce teachers to meet the demands of the education system.

Girls' Primary Education: Although the need to keep more girls in school at both primary and secondary school levels is acknowledged by the government, its five-year investment plan proposes only to immediately address the needs of girls at the secondary level through scholarships, fee reductions, and other measures. There is no corresponding program for primary school girls, whose attrition rate is twice that of boys.

(3) Global-level: Unresolved Questions

Teacher Remuneration: The issue of teacher remuneration is the key to the success of the primary education subsector reform. Although all agree that teachers must receive a higher wage if the government is to both attract and retain teachers and provide the motivation to improve school quality, there is little consensus on how to proceed. The Ministry of Education has recently implemented a modest salary increase and is considering additional allowances, which, if implemented, will still be inadequate to move teachers to a living wage level. Simultaneously, the government is crafting a massive civil service reform, which, if accepted, will most likely supersede ministry salary adjustments. However, in both cases, it is uncertain whether either the ministry or government will be able to implement this salary restructuring, both from a political and budgetary perspective. (See Economic and Financial consideration below).

Parents' cost of schooling: A corollary of the teacher remuneration problem is the problem parents face in financing their children's primary school education. Currently, it is estimated that they pay up to 90 percent of the total cost of primary education. The White Paper states that the government desires a more equal distribution of the financing burden (with the eventual provision of universal free primary education), and that parental and PTA contributions should be limited to supporting school physical plant. Without sufficient government remuneration of teachers, however, these goals are unrealistic. A large portion of parent and PTA payments go to "topping-off" teachers' salaries. If the government cannot provide teachers a living wage, parents will continue to bear the lion's share of primary education costs.

Piece-meal Financing of the Educational Reform: The five-year investment plan proposes a US\$309,786,900 priority program for investment to support the educational reform. The government is relying on donor funding to finance development initiatives, and the plan--though comprehensive and well-documented--takes a menu approach. Donors will certainly choose to support those projects that are attractive and correspond to their policy mandates, budgets, and other parameters. The risk is that the reform could become both donor-driven and lopsided because of the government's inability to pay for those initiatives not funded by donors.

Pace of Reform Implementation: The ability of the government to finance the reform is an overarching concern. The easing of resource constraints will most likely proceed at a limited pace, thus slowing the rate of reform implementation and extending the timeframe in which it will be accomplished. Furthermore, restructuring the educational system will require time: stakeholders--from students and their parents to teachers and administrators--must be convinced that the reform is in their best interests. Efforts to build support for the more specific and visible of the various components of the reform, such as curriculum and exam reform, and to modify reporting and accounting systems may take more time and resources than the government and donors have projected.

THE USAID PROGRAM

Framework

Because of the broad base of need in the education sector in Uganda, the introduction of any educational reform will have to consider a wide range of goals: improvement of the quality of learning, increased access, greater efficiency, and a concern for equity. Establishing priorities among these goals in terms of a realizable and sustainable program is the first challenge in designing any donor intervention. (The following discussion is based on the Preliminary Logical Framework in Appendix II.)

Goal

The goal of the USAID/Uganda's Support for Ugandan Primary Education Reform Program is

to improve the quality of and reduce inequities in primary education.

This goal follows from the analyses and conclusions presented in the mission's draft Country Program Strategic Plan, the March 1990 education sector assessment, and the October 1991 management and ethnographic studies.

Strong arguments must be made for focusing the USAID program on quality instead of access, given the government's goal of free universal primary education (UPE) by the year 2003.

Despite the turmoil of the last two decades in Uganda, students' access to schooling has increased. Gross enrollment ratios at primary level today are estimated at about 70 percent, which, though not respectable in terms of goals of UPE, are higher than in many African countries. This increase in access has been due to the increasing parental burden of primary school finance in the face of limited governmental expenditure.

What presents a striking contrast with other countries in a similar state of development is the percent of GNP spent on education in Uganda. In the early 1980s--the most recent period for which we have data that compares Uganda with other African countries--Uganda's education expenditures ranked very low:

Uganda spent only 1.3 percent of its GNP on education: the lowest of all African countries.

Uganda spent only 16 percent of its recurrent ^{education} expenditure on primary education, less than any other African country. The next lowest country, Ghana, allocated twice as much, proportionately, to primary education.

Uganda spent only US\$8 per pupil in the early 1980s, while the average, low-income, non-arid African country spent US\$30 per pupil¹⁵.

Although this low expenditure on education does not in itself portend low quality, it has in Uganda. While the race to get more children into school characterized the post-independence phase of most African countries, planners have come to realize that increased emphasis must be placed on educational quality if basic literacy, numeracy, and problem-solving skills are to be acquired. Expansion of the educational system in Uganda has taken place largely without design, resulting in a downward spiral in quality.

In Uganda, the argument for making improvements in quality rather than in just continuing to expand enrollments is strong--stronger than in most African countries that have expanded their numbers of schools with less dire consequences for classroom learning.

(1) Further increases in access without major improvements in the classroom can only offer the veneer of education, given the constraints under which Ugandan teachers are working.

(2) Improvements in the quality of education are required to halt the downward spiral which has sapped the professionalism, commitment, and esteem of the teaching force.

(3) Improvements in the quality of education are needed to ensure that parental demand for education does not drop off due to lower returns to an increasingly heavy burden of parental investment in their children's education.

Purposes

The proposed USAID Support for Ugandan Primary Education Reform Program translates the overarching goal of improving educational quality and equity into three purposes:

¹⁵ Figures are taken from World Bank, Education in Sub-Saharan Africa: Policies for Adjustment, Revitalization and Expansion, (IBRD, Washington, D.C., 1988). Under the NRM Government, there has been a concerted effort to increase the share of government expenditure allocated to education, so that whereas in 1990, the percent of GNP spent on education was still only 1.4%, in 1991/92 it is estimated that 3.6% of GNP will have been spent on education. Similarly, 27% of the government's recurrent expenditure in 1989 went towards primary education, an improvement on the 1983 figures, but still leaving Uganda on the lower rungs.

- (1) Improve the quality of classroom instruction to enhance student acquisition of basic skills;
- (2) Improve the efficiency of local level education administration, management and accountability;
- (3) Reduce inequities in access to and persistence in primary education.

Overview of Program

The program consists of five major program components in support of these three purposes (see Objective Tree in Appendix II). The first two components directly support the first purpose, the next two support the second purpose, and the final component directly supports the third purpose. **Nonproject assistance** will be provided as a means of encouraging the government to undertake policy reforms in these program components, reforms that are critical to meeting the program's purposes. Generally speaking, **local currency** generations will be programmed to ensure that the policy reforms can be implemented. In addition, **projectized technical assistance** will be provided to assist the government in operationalizing these reforms.

The first program component, in support of the first program purpose, is to increase teachers' salaries. Only with a concerted renewal of the recognition once afforded teachers will quality improvements be sustained.

The second program component, also in support of the first program purpose, is to enhance the quantity and quality of instructional materials. The dearth of textbooks, teachers' guides and other materials would make any improved teaching methods resulting from the IMISS initiative an unfair challenge to teachers.

The third program component, in support of the second program purpose, is the decentralized, inservice teacher and management training (the IMISS program) to be implemented initially in ten districts as the vehicle for improvements in the quality of classroom instruction and school management. This component is the heart of the technical assistance under the program.

The fourth program component, also in support of the second program purpose, is to further catalyze community support for primary education and to improve efficiency (through the IMISS network) in the management of primary schools within the IMISS districts.

The final program component, in support of the third program purpose, is to encourage the government to focus policy on

rectifying the disparity in girls' access to, and rates of persistence in, primary education.

End of Program Status

The program will result in a stronger decentralized primary-school system, with an improved capacity at the district and school levels to provide basic skills. Ten of the 34 primary-school districts will have strong support from district-level service centers. The number of competent teachers will be increased and stabilized, as one-half of the teachers in the country will receive effective in-service training. Instructional materials--textbooks and supplementary materials--will be available and put to better use in all primary school grades in the four major subjects, English, math, science, and social studies, on a 3:1 student to book ratio. An efficient resource-distribution and accounting system will be in place, with district- and school-level personnel better able to manage fiscal, material, and human resources. The teaching profession will regain recognition, and teachers will be more adequately rewarded for good work. As a result, nearly one million children in primary school (40% of end-program enrollment) will receive a better education than they have for nearly two decades. In addition, the imbalance between girls and boys who stay in primary school will be reduced, and the inequitable distribution of government resources to urban and rural--and otherwise disadvantaged--schools will be partially improved.

Outputs

In quantitative terms, the program is designed to produce these kinds and approximate amount of outputs¹⁶:

100 trained tutors, able to provide effective in-service training to teachers;

45,000 to 50,000 trained primary school teachers, able to help students learn basic skills relevant to their lives;

3,000 trained primary school head teachers, able to manage and account for the financial, material, and human resources of the school;

100 trained district education officers and staff, able to manage the flow of resources to schools and to account for the use of those resources;

100 trained inspectors, able to provide ongoing professional support to teachers in the classroom;

¹⁶Estimates taken from Evans and Odaet, 1991.

3,000 trained school management committees, able to offer useful community support to the school.

In qualitative terms, the program will result in policy changes that produce:

Better paid, better-trained, and more able teachers;

A stronger local institutional capacity to manage resources and deliver educational services;

A more workable balance between community support for schools and central regulation of resources distributed among them; and

More girls likely to finish primary school, and more women likely to become and remain teachers.

Ultimately, the project will contribute to the ministry's ability to provide a basic education to primary school children (grades 1 through 7), enabling them either to continue on to secondary school or to begin productive work.

Inputs

The program will achieve its purposes through combined inputs of nonproject assistance (NPA), technical assistance, and the provision of equipment and supplies, totalling US\$108 million over a seven-year period beginning 1992.

Nonproject Assistance

US\$90 million will be provided in the form of nonproject assistance related to specific government policy reform measures, including an increase of resources to primary education. Without increasing resources, the government will be unable to address major system weaknesses. The NPA will not only encourage the government to carry out its policy agenda of increasing the allocation of government resources to the education sector and to the primary-education subsector, but the programming of local currency generated from the NPA will ensure that at least a portion of the requisite resources are set aside for these expenditures. NPA is intended to encourage the government to implement policy changes in the five program component areas discussed above:

- (1) Increase teachers' salaries toward a living wage;
- (2) Increase per pupil expenditures on instructional materials;

- (3) Staff and strengthen Education Service Centers;
- (4) Provide block grants to selected schools;
- (5) Increase the persistence of girls in primary education.

The following discussion of what is required in each program component serves to give a broad picture of what the focus of the policy reforms will be. Specific conditions derived from each of these program components are described in the subsequent section on implementation issues and conditionalities.)

(1) Increase teachers' salaries. The inadequate income received by teachers is a binding constraint on improving the quality of education, including primary school education. NPA will encourage the government to institute the critical salary reform it is contemplating and, by extension, compel it to allocate greater resources to the primary education budget. Unless teachers are paid more, they cannot be expected to stay, and there is no use training them. Increased teachers' salaries will motivate competent teachers to join and persist in the teaching force and to compensate them for the opportunity costs of staying in the classroom. Teacher compensation must become the responsibility of the government, entailing system-wide policy changes both in budgetary outlays and personnel management.

(2) Increase per pupil expenditures on instructional materials. The scarcity of instructional materials (such as textbooks, teacher guides and reading books) has been a major constraint to quality improvements in primary education. In order to increase student learning and facilitate classroom instruction, NPA conditionality will encourage the government to purchase textbooks, teachers' guides, and library sets, and to distribute them to all schools throughout the country on an equitable basis.

NPA is a more appropriate means than is project procurement to assist the government in equipping schools because (a) creating a parallel project-level textbook distribution structure would not help the ministry develop its institutional capacity for this kind of operation, (b) in its Project Implementation Unit (PIU), the ministry has the mechanism to budget for, purchase, and distribute massive amounts of materials, and (c) as project assistance will be largely restricted to certain districts, at least initially, it cannot efficiently deliver materials to schools outside of those districts.

While the IMISS program concentrates on an intensive,

integrated program of quality improvement in selected districts, NPA related to the equitable distribution of instructional materials will enable the government to address the needs of all the country's primary school classrooms at once, thus affording some improvements in quality during the period before the Education Service Centers are replicated nationwide. Although the IMISS approach is likely to produce the most lasting improvements in the quality of teaching and learning, the rest of the country should not be neglected in this transition period. These books should be a good resource for all teachers, and they will be integrated in the teacher training programs in those Education Service Centers already up and running.

There are several reasons for providing books to students at all levels of primary school. First, improving basic education necessitates improving primary schools as a whole, not just some grade levels. Second, reform measures are aimed at preparing primary school graduates for secondary schooling or productive work. They need effective instructional materials in each grade level in order to reach a learning threshold at which they will have acquired not only basic literacy and numeracy, but also basic living skills. Third, the PLE is currently the focus of primary school. While methods of assessment, including the PLE, will be changed during the life of the program, parents who observe no quality improvements in upper primary grades, may decide not to send their children to school at all.

As described above, the ministry has been working since 1987 on a reform of the whole education system. The World Bank will help the ministry to carry out those reforms in the primary subsector. The reforms are anticipated to be legislated by the time the program begins. The particular areas of those reforms that concern this program are that the ministry:

Reform the primary-school curriculum to include the teaching of basic literacy and numeracy, problem-solving skills, and information and skills relevant to students' lives.

Revise the examination system to reflect the new curriculum and to include continuous assessment of students by teachers within the classroom. All teaching activities are now driven by the primary-school leaving exam, which is inappropriate and irrelevant to the needs of most students at that level. The exam needs to be revised and linked to both the new curriculum and to methods teachers use for continuous assessment of their students.

The World Bank has agreed with the ministry to provide the technical expertise and financial assistance needed for these reforms. If they appear to be lagging, and affect the progress of the USAID program, USAID will consider a modest amount of additional technical assistance to help develop curricula and more relevant exams.

(3) Staff and strengthen Education Service Centers of the IMISS. The systemic improvement in quality envisioned by the program will rely heavily on the development of human resources that are now far from adequate. The ministry must identify strong candidates for Education Service Centers in the districts and related departments of the central office, and agree either to strengthen or to remove those who are now assigned to centers that will participate in the IMISS program. This issue is discussed more fully in the institutional analysis section. Again, provision of NPA will encourage this change.

In addition, the ministry must make the necessary effort to recruit women teachers in IMISS districts.

(4) Give block grants to participating primary schools. Using NPA conditionality, the government will be encouraged to establish block grants to serve as the focus for the management training modules of the IMISS outreach program: they will give the communities something specific to manage in the context of these courses.

The grants are intended as recognition of the support given to the school by the community and to act as an incentive for further community development efforts surrounding the school. They can be used to purchase a variety of school inputs chosen by the local community, with only general stipulations imposed. For example, the school management committee might decide to apply for funds to cover the cost of school roofing, or additional school furniture, to improve teachers' housing, or for the purchase of additional teaching aids. The committee would apply to the District Education Officer (DEO), who is the administrative manager of schools in the district, and who will vet the application for suitability and then order the requested goods on behalf of the school. Information concerning the block grants will be given to the school management committees during their management training in the IMISS outreach program.

(5) Increase the persistence rate of girls in primary schools. The government has declared its intention to institute fee waivers for low-access groups starting at the secondary level. NPA will encourage the government to expand its program for girls to the primary level. The available information on why girls drop out of school, and

what it would cost to keep more girls in school is inadequate to determine at this time the best way to finance girls' access to education. NPA will encourage the government to select and institute those measures that seem to be most effective.

Some indication of the magnitude of funds required to affect girls' attrition rates can be seen in two scenarios. If the government were to fund the estimated cost to parents of \$15 a year for every girl in grade 2 for only one year during the life of the program, the total cost would be just under \$27 million. If the government were even more ambitious, and funded a cohort right through primary school, the resources required would be in the billions.

Support for girls in primary school is critical if the benefits of girls' basic education are to be realized in Uganda. Although the local currency generated through the program's NPA cannot fund a full solution to the problem, it can encourage significant policy changes.

Project Assistance

While nonproject assistance helps to create the policy framework for educational reform at the primary level, project assistance will help the ministry manage increased resources implicit in the policy changes and implement the training components of the program.

The project component of the program will provide the following technical assistance, equipment, and supplies:

US\$13.2 million for 42 person/years of U.S. technical assistance: six people working during six years, five at the district level in Education Service Centers, and one in the PIU. The technical assistance team will be responsible for working with Ugandan counterparts and local technical assistants to design and implement the IMISS program. The team will include specialists in curriculum development, teacher training methods, school management, materials development, and project monitoring and evaluation. More limited technical assistance would also be needed in the following areas in which the World Bank is specializing:¹⁷ curriculum reform, examinations, and continuous assessment.

US\$1.3 million for 42 person/years of local technical assistance: seven people working during six years, two in the central ministry offices and five at the district level

¹⁷ This would be strengthened were the Bank, for any reason, to withdraw or reduce its support in these areas.

in Education Service Centers. In addition, one personal services contractor will be hired to work in USAID/Uganda.

US\$1.5 million for short-term technical assistance and training to supplement the long-term specialists described above. This will include the technical assistance needed to provide special workshops and seminars, monitor and evaluate the program, and help in specific teacher-training, management and materials-development functions.

US\$2.0 million for the purchase of teaching aids and equipment and materials for use at the district level in producing student handouts and other pedagogical materials. These materials will be distributed through Education Service Centers to primary schools.

Implementation Strategy: The IMISS Approach

A systemic approach to educational reform is essential because the causes of the serious decline in the quality of Ugandan education are interrelated. Partial "quick-fix" solutions to the shortage of resources are unlikely to be sustained in a weak system. Short-term initiatives on one front will only be dragged down by lack of progress on others.

Fortunately, the ministry and the World Bank have also concluded that comprehensive reform is essential, and that in-service teacher training is key to improving the quality of basic education. They have designed the Integrated Management and Instructional Support System (IMISS). The IMISS model, based clearly on an education and teacher support model that has been successfully implemented by AID in other contexts, will be the centerpiece of USAID's project assistance.

The Bank's education sector loan will provide financial and technical assistance to central ministry offices, including those responsible for planning and management, curriculum development, and examinations and testing. The Bank will also lend substantial support for building the physical structures: approximately 4,200 classrooms in schools and colleges.

The basic structure for the delivery of USAID services and commodities will be the Education Service Centers served by the IMISS. These centers have been planned by the ministry, with technical assistance from the World Bank, as replacements for the faltering primary teacher training colleges (TTCs). They will transform pre-service training colleges into education service centers that support teachers and other school personnel already

in place. They will offer in-service teacher training¹⁸, management training for head teachers and school management committees, training for inspectors and district level education officers, training for tutors in teacher-training centers. They will also produce instructional materials for schools in the districts they serve.

The project will operate mainly out of the Education Service Centers because their proximity to schools provides the means to deliver training and other resources through decentralized structures, getting them to schools more directly than by channelling them through the central ministry offices. The breakdown in central authority during the recent period of turmoil gave rise to new structures and patterns of control which are appropriate for the rehabilitation and redirection of the education sector. While the centralized functions of the ministry must be strengthened in order to provide quality control and an equitable distribution of resources throughout the country, they must be balanced with the positive aspects of de facto decentralization. Decentralized management centers are also easier to monitor and less open to corruption, as the layers of accountability are fewer.

Even though USAID project resources are largely targeted at the district level, central ministry offices are not being ignored. The chief of party and field coordinator will be located in the PIU at the central ministry (see the organization charts in Appendix IV).

Ten TTCs, each in a different district, have been selected by the ministry to become Education Service Centers. These ten have been selected according to criteria chosen to counterbalance need (in terms of district enrollment, percent of female enrollment, percent of untrained teachers, and gross enrollment ratios) with regional representation. Additional criteria of accessibility, location in relation to feeder schools, and suitability of building site were used in the final selection of the actual TTCs to be developed into Education Service Centers (see Annex A of the Aide Memoire in Appendix V for a discussion of selection criteria).

In-service training will be offered to teachers during summers and other breaks. Each Education Service Center will be attached to one demonstration school. A network of coordinating schools surrounding each center will, in turn, be linked to a group of satellite schools, covering the whole of the district. Teachers will come to the centers for training modules, and college tutors

¹⁸Teacher training of new recruits will be more in-service oriented, offering modules to new teachers while they are in the classroom.

will visit schools in an outreach effort for on-the-job assistance. The coordinating schools will have additional facilities such as an extra classroom for their outreach to the satellite schools. Two of the centers will have tutor training facilities attached to them¹⁹.

Relationship of USAID Project to the World Bank Project

The USAID program will complement the World Bank's program by providing financial incentives to the government and to schools, and by giving technical assistance to the IMISS program. But the program is not dependent on the World Bank's inputs.

The risk of the World Bank's pulling out of its planned investment is small, as it appears to be committed to its Education Sector Development Project. It has carried out 17 detailed pre-investment studies and completed its staff appraisal report in November, 1991. US\$64.6 million is earmarked for the credit it will extend to the government, with a start-up in July-August, 1992²⁰.

The Bank will help strengthen the institutional capacity of ministry offices whose responsibilities go beyond the IMISS program and primary education per se. It will finance physical and technical improvements in the National Curriculum Development Center and the Uganda National Examinations Board, as well as technical expertise in the Ministry of Education's planning and statistics unit. These investments will alleviate systemic constraints to quality improvement in the primary sector.

Within the IMISS program, USAID will provide project assistance to a discrete, coherent piece, namely the "software" portions: USAID will finance foreign and local technical assistance, and teaching aids, equipment and materials for the participating centers and schools. USAID will also cover the costs of workshops and seminars at the centers and through the outreach program.

The ten centers that the Bank has agreed to support will cover about one-third of the schools in the country. With the addition of USAID's financing, the Bank may be able to expand its support

¹⁹ See World Bank, Staff Appraisal Report, Uganda, Primary Education Development Project, October 10, 1991 and Aide Memoire, November 21, 1991 for complete details.

²⁰ This assumes that the Bank will go to post-appraisal in January-February, 1992, into negotiations with the GOU in March-April, 1992, and to the Board in May-June, 1992.

and construct additional Education Service Centers as well as build and rehabilitate further schools in these other districts²¹. USAID's program, however, is not predicated upon such a development²².

Regardless of the eventual pool of resources available to establish Education Service Centers, the USAID project will support no more than ten centers during the initial project phase. This limited scope will allow technical assistants and their Ugandan counterparts to pilot activities and to make adjustments in plans and procedures before instituting them on a larger scale. The schools' capacity to absorb major new resources needs to be tested, and a careful, focused initiative is appropriate. It is envisaged that those trained at the initial ten centers will be able to help replicate the IMISS program in new districts in a second phase development.

Were the World Bank to pull out, the USAID portions would still be intact, though some rescheduling of inputs might be needed. There is no question that without the capital investment envisaged by the Bank the IMISS program would be more difficult to carry out. However, neither is there any doubt that using the TTCs as the base, the USAID program would be feasible, though less comprehensive.

A written agreement will have to be reached between USAID and the World Bank concerning their respective contributions to the IMISS program.

²¹ It is estimated that an additional four centers could be built with World Bank funds made available as a result of USAID financing part of the IMISS program.

²² It would be suitable to amend the USAID program to provide the requisite technical assistance, teaching materials and supplies and equipment, were this to happen, but this is not reflected in the budget for the current program.

RELATIONSHIP TO USAID/UGANDA'S INTEREST AND CAPACITY

Relationship to Strategic Objectives

USAID/Uganda has recently completed its Country Program Strategic Plan (CPSP) for 1992-1997. The overall goal of that period is to establish the basis for sustainable improvements in the Ugandans' standard of living.

The second of four subgoals is to improve the quality of the education system. Education is key in creating the skilled and productive manpower base required to alleviate poverty and fuel economic growth.

The mission had preliminarily targeted four program purposes--means of helping the government improve educational quality:

- (1) Increase the number of good primary school textbooks,
- (2) Encourage the government to revise its examination system,
- (3) Raise teachers' standard of living,
- (4) Give more teachers in-service training.

The proposed program directly addresses the mission's sub-goal of improving the quality of education and the three targeted purposes of teachers' salaries, in-service training, and textbooks. Limited technical assistance will address reform of the examination system, to complement the World Bank's major effort.

The proposed program also deals with some equity concerns. It includes measures that will redress the disparities between girls' and boys' finishing primary school by raising the persistence rate of girls. And it encourages the government to cover a larger share of education expenses, thus reducing the cost burden of parents and presumably allowing poorer parents to send children to school.

The mission is amenable to revising the education targets stated in its country program so that they reflect the three purposes of the proposed project:

- (1) Improve the quality of classroom instruction to enhance students' acquisition of basic skills.
- (2) Improve the efficiency of local level education administration, management and accountability.

- (3). Reduce inequities in access to and persistence in primary education.

The program also goes beyond what was initially envisioned by the mission in its scope and complexity. Following the intensive study and recommendations of three consultant teams, the mission is convinced that the primary education subsector's need for help requires a systemic solution rather than short-term material support. The proposed USAID program uses the opportunity to cooperate with the Ministry of Education and other donors in a well-conceived initiative that emphasizes in-service teacher training and school managerial support.

USAID/Uganda's Capacity

The mission is adequately staffed to implement this primary education program. Within the General Development Office, there is a USDH Chief who will devote time to the policy dialogue and macro-project elements of the program, a USDH education officer who will manage the program, and a USPSC who will assist in implementation support.

Institutional Analysis

Institutional Support for the Program. The program will take place within the Ministry of Education (MOE). USAID has discussed with ministry officials the general lines of the program and received a written request for assistance. Prior to those discussions, the World Bank produced an appraisal outlining the IMISS program and, in November 1991, reviewed it with the government. The agreements reached between the two parties were outlined in an Aide Memoire of November 21, 1991. A major component of the USAID program, supporting IMISS centers, will build on those agreements. The organization, staffing and function of the IMISS network was defined at the ministry and district level. Indications are that the ministry has a good understanding of the program and is supportive of the proposed institutional changes. As the selection of districts in which the initial IMISS centers will be placed has included extensive discussions with the ministry, its commitment to the selected locations is likely to be strong.

Within the ministry, the envisaged Project Implementation Unit/ IMISS management unit will be responsible for implementing the program at the national level. The ministry will support this role because it is seeking to establish the PIU as the unit which co-ordinates all donor activities.

IMISS calls for a district-orientated role for the inspectorate, which is at odds with the current regional and national structure. But the inspectorate recognizes and fully supports the IMISS initiative, particularly its quality-control function and its decreased dependence on the DEO.

Districts selected to receive the first IMISS centers are likely to support the intervention. Generally, the districts face significant problems with a paucity of funds and all parties (PTAs, Schools, TTCs and district offices) gratefully accept assistance from outside sources. Previous USAID analyses indicate that the priority of all organizations at the district level revolves around building and rehabilitating schools, providing furniture, and improving the quality and training of teachers. A program that promises to meet these locally perceived priorities will be accepted with open arms. But as they have desperately low resources, neighboring districts may be disappointed and even resentful of the good fortune of the selected districts. A potential side effect might be that IMISS centers draw the higher quality human resources away from nearby districts to the detriment of their neighbors.

Institutional Commitment to NPA Conditionalities. The government's motivation and commitment to change appears strong. In the background to the 1991/92 budget, produced by the Ministry of Planning and Economic Development (MPED), equity of access and gender issues are highlighted, and a commitment to adjust imbalances is outlined. But some of the stated goals are ambitious, particularly Universal Primary Education by the year 2003. Overall, the budget demonstrates a significant reallocation of resources from the tertiary and secondary education sectors to the primary education sector. In addition, the government is committed to reforming and streamlining the civil service, which includes teachers, and eventually providing higher rates of pay. Also, the government has recently introduced allowances for teachers, which provides a significant increase in its contribution to their pay. At the Ministry of Local Government (MLG), the 1991/92 budget provides for a tenfold increase in funds for the purchase of scholastic materials.

But there are no firm commitments to continuing to fund donor initiatives at the levels required to sustain them. It may be unrealistic to expect that this will be the case. There is, and will continue to be, opposition from the tertiary and secondary education sectors, which are effectively losing out in terms of resource allocation.

Ramifications for Various Stakeholders. At the central ministry level, the consequences and ramifications of the proposed program will be limited compared to the effects locally. The ministry has agreed to the organization and management structure of the IMISS so there are likely to be few surprises. The role of the PIU will be a logical extension of their current activity.

At the district level there may be some more significant ramifications. The IMISS initiative places significant importance on the selected TTCs, not only in the enhancement of their capacity to train teachers, but also in their managerial role within the district. As a TTC is converted into an Educational Service Center (ESC) at the IMISS center, it will be led by a director whose role is significantly upgraded from that of the traditional TTC principal. The director's extensive coordinating and planning role throughout the district will also serve to increase the power of this post. District inspectors will report to the IMISS director rather than to the DEO on a day-to-day basis²³. Thus, the role of the DEO, who is now the chief education official in the district, could be undermined if the responsibilities and reporting structure of these two offices are not clearly set out. (Removing the DEO's influence over the district inspectorate will have the positive effect of removing

²³ Even though officially they report to the Commissioner for Education.

inspectors from the offices on whose activities they are supposed to be reporting). To fully understand the ramifications of the IMISS initiative on the current district management structure, the existing bodies and their functions are outlined below.

Currently, the District Administrator (DA) is the political leader of the district, and the District Executive Secretary (DES) is the administrative leader. The government has announced possible reforms that may shift political responsibility to the Revolutionary Council District Level (RC5) Chairman. The District Education Officer (DEO), who reports to the DES locally, liaises with the ministry to ensure that central policy is implemented at district level and is responsible for planning and managing the provision of education within the district. Traditionally, this role includes managing the school inspection program, providing teacher training, organizing and administering examinations, and transferring and appointing teachers. In conjunction with the DES, the DEO controls the purse strings as the authorized signatory to the local education accounts.

Several mechanisms exist to facilitate management of the education system at the district level. The District Education Committee (DEC), on which the RC5 Chairman and the DEO sit, considers education financing issues and school mapping and discusses key activities in the district. Typically, key activities cover issues such as inspections, the condition and location of schools, distribution of resources such as textbooks and scholastic materials, and financial irregularities. County and subcounty committees take the structure down to the local level. In respect of financial management, the District Finance Committee (DFC) evaluates the local budget, and the District Tender Board discusses funds allocation and evaluates the purchase of goods and services. Both the RC5 Chairman and the DEO sit on these committees.

Further district level bodies in the process of being established are the Teaching Service Committees. These organizations are intended to devolve responsibility for personnel matters from the central ministry to the district level. This would entail recruitment and appointments, as well as other normal personnel responsibilities being handled closer to the teachers in post.

In theory, the School Management Committees (SMCs), comprised of head teachers, parents and RC members, report up the Education Committee structure. The SMC is the managing body of the school; it considers educational policy and finance issues, including the level of fees proposed by the PTA. The fees ultimately require approval of the DEC. In practice, these bodies are autonomous, with the head teacher often playing a strong role. Accountability of the SMCs and PTAs to the district structure is limited, and the financial management capability is low.

Currently the role of the existing district and subdistrict functions and their relationship to the IMISS initiative have not been evaluated in any depth by the World Bank²⁴. In respect of the IMISS as an individual entity, the organization structure has been broadly outlined both at the national and district levels. An ESC Consultative Board will replace the Board of Governors at the TTC, playing an advisory rather than supervisory role. It will include representatives from the teachers, PTAs, RCs, head teachers and community leaders. The Board will advise on policy and implementation and will be responsible for informing the district and its people about the role of the ESC.

In view of the existing structures at the district level, the interfaces between the district and the ESC would seem to be best placed in the laps of the DEO and the RC5 Chairman. These two functionaries play a senior role in the policy and administration of education in the district and attend the key bodies that manage education and finance (the DEC, DFC and Tender Board). Placing the RC5 Chairman and the DEO on the ESC Board would be the logical approach to resolving the role of the DEO in IMISS and would ensure a clear line of communication and information exchange between the ESC and the district. Through this approach, the activities of local government would be coordinated with the IMISS. Because the Board can only advise the ESC Director, and the district inspectorate reports to him or her on quality control issues, the inspectorate would retain its independence from the DEO.

A representative of the new district-level Teaching Service Committees should sit on the ESC Board so that certification of upgraded teachers is on their agenda.

At the new ESCs, the role of the director, deputies, and tutors will require substantially greater management and technical skills than the existing principals and their staff are likely to possess. Established staff may resist being replaced. If, for political reasons, inadequate staff are retained, the management of these new institutions could suffer. The IMISS center concept assumes that high quality staff can be placed in key positions.

Institutional Capacity to Implement the Project

(1) **IMISS.** The national level organizational structure of the IMISS will be governed by an IMISS Management Committee and an Advisory Committee. The reporting structures, information flows, and administrative procedures relating these committees to the project management unit will have to be established. This unit will be staffed by full-time IMISS officers, who will also draw

²⁴See the World Bank's Aide Memoire of November 1991 in Appendix V for a description of the IMISS structure.

heavily from the functional specialties within the PIU. This will certainly require some strengthening of the current PIU and may involve support for specific functions of the unit. The PIU plans to have seven to nine staff members responsible for procurement and distribution, but currently has only two in post. In addition, the IMISS management team within the PIU will need to develop reporting links with district-level managers (IMISS center directors), and to provide means for logistical support in textbook distribution.

A significant degree of institutional capacity will also need to be built at the district level. The role of the new ESC director, senior support staff, and the staff at the demonstration and coordinating schools will require human resource skills significantly beyond current local capabilities. Roles, responsibilities, and reporting structures will have to be designed and clarified. Incumbents, particularly inspectors, will need training in their new roles. The relationship of new bodies such as the ESC Consultative Board to the existing management structures, such as the District Education Committee, will need to be clarified. In many respects, the districts will undergo organizational changes that require careful thought, localized technical assistance, and the full backing of both local and central government.

The ministry's ability to account for funds, from the center down to the local level has been analyzed, in the "Education Management Study Report" prepared for USAID in October 1991. Appendix D of that report provides a detailed evaluation of the existing accounting systems in operation. The overriding finding is that the existing systems are poorly administered and that there is significant scope for diversion of funds.

(2) **Teachers' salaries.** The weaknesses in the current salaries system have been documented in the management study cited above. Notwithstanding the issue of whether the government has the ability to fund wholesale salary increases, there is the additional issue of whether the leakages within the system can be reduced so that teachers can receive the benefit of the changes. Wholesale redesign of the system may not be appropriate. The system cannot easily bear further disruption when many teachers are already not being paid their full allowance, and the new pay changes have not been implemented. However, it may be of value to review the system in depth and seek to strengthen it through the introduction of additional internal controls. The role of the new Teaching Service Committees may be a helpful conduit for further control.

(3) **Textbooks.** Management and accounting of the textbook program probably carries the least risk in the proposed program. The World Bank has already established, within the ministry, a PIU

staffed by experienced expatriates. Previous experience with textbook procurement and distribution places the PIU in a position to handle this aspect of the program adequately. The proposed World Bank program budget includes some strengthening of the PIU's capacity.

(4) **Scholarships for girls.** If scholarships for girls becomes the mechanism for raising the girls' persistence rates in primary school, this would entail a new type of grant for the ministry or the districts to manage. Conceptually, the current system for paying the fees of orphans is similar, in that specific groups are being targeted. But as this system is poorly administered, payment of scholarships through this process should be avoided. The introduction of scholarships for girls would require a significant degree of preparation. Both administrative and financial procedures must be developed, and implementing the new system will take time and require significant staff training and logistical support, including the production of documentation required to administer the system.

(5) **Block Grants.** Block grants would only be given to participating schools in IMISS districts, and teaching schools to manage those grant funds is one of the training objectives of the program. Thus, their administration will be closely monitored. Nevertheless, like scholarships for girls, the administration of block grants to schools will require systems design and implementation. The program will require further considerations in design because, unlike the scholarships, the items being purchased are not as specific. While the intention of the grant is to provide schools with funds that they can use for their particular needs, some uses, such as supplementing teachers' salaries may be inappropriate in the context of overall program policies. Consequently, the ministry will need to establish procedures to monitor compliance with set criteria.

Alternatives to Proposed Implementation. The ministry has a well established Project Implementation Unit (PIU) attached to the planning unit. The PIU is one of the better administered sections within the ministry and already has technical assistants on its staff. The ministry encourages donors to utilize the PIU in order to enhance the co-ordination of funding. In addition, the PIU has extensive experience in managing initiatives such as textbook procurement and distribution and already has a planned role in the IMISS initiative. The positive benefits of working with the PIU effectively preclude alternatives such as managing the program through nongovernmental organizations or through a new, independent unit. Alternatives would require substantial investment in time and resources to establish the necessary management systems that, in any event, already exist.

Summary of Institutional Constraints. A number of risks that surround the project need to be resolved:

(1) **Uncertainty of increases in teachers' salaries.** An overriding problem will be the ability of the government to meet the funding obligations associated with the salary reforms under this program. The government has already budgeted increases in teachers' salaries for 1991 and 1992, yet these have not been fully implemented. Many teachers are still not receiving even their pre-increase salaries because of the weaknesses of the current system. Forward financial planning by the government is still in a formative stage, and there does not seem to be any financial plan for government support and maintenance of initiatives from donor agencies.

(2) **Weak financial control systems.** The nonproject assistance conditionality related to teachers salaries requires institutional reliance on an existing system that is weak. There is a risk that, even if the government allocates funds, the changes will not be implemented in a timely manner and that leakages of funds will reduce the level of benefits that reach the intended recipients.

(3) **Absence of existing systems.** The nonproject assistance conditionality related to scholarships for girls and to block grants requires the introduction of new systems. There is a risk that a substantial lead time will occur before the new systems are in place and that, given the ministry's inadequate capacity to manage existing systems, these will be poorly administered.

(4) **Potential weakness in IMISS management capability.** The IMISS initiative requires a new breed of manager whose role exceeds the capability of those in the existing TTCs. There is a risk that the ESCs will be managed by staff who are not capable of fulfilling their responsibilities and that the ESCs are poorly managed.

(5) **Weak local organizational structure and capacity.** Technical assistance already exists within the key planning ministries, finance and planning, and the World Bank will assist the ministry planning unit. So there would be limited value in additional aid from USAID to these organizations.

The IMISS program will introduce an extra administrative burden, both centrally and locally. The program will draw heavily on the resources of the PIU. Locally, the IMISS district organizations will need to undergo changes that will affect the roles within the district offices as well as within the ESCs. Both these risks have been partially addressed in discussions between the World Bank and the ministry. Some USAID assistance could quickly resolve the PIU-related difficulties. The changes in the roles of the DEO, education committees and the inspectorate need

to be clarified and agreed upon by those involved.

Additional Studies Recommended

(1) An analysis of the organizational structure and roles of the ministry and the MLG on the district level, and proposals for reorganizing and adequately staffing these functions.

(2) A design and implementation of systems for administering block grants and, possibly, scholarships for girls.

(3) Technical assistance to review the salaries system in detail, recommend enhancements in internal control procedures and implement recommendations.

Economic and Financial Considerations

Before proceeding with a discussion of these considerations, it is important to point out that a severe dearth of data prohibits carrying out any formal analyses at this stage. The following sections indicate the types of analysis that should be carried out in developing the PAAD, and a subsection at the end of this section discusses the types of data Mission will attempt to obtain in order to effect these analyses.

Financial Analysis

The development of the government's educational reform program has resulted in numerous studies and reports that bear on the cost and financing of education in Uganda. Nevertheless, certain key data, critical to this analysis, are not available. They are: earnings-education data; parental and PTA contributions to educational costs; determination of pending teacher salary raises and/or supplements; historical student flow data and unit costs; and updated budget estimates of recurrent government expenditure reflecting the proposed reform. The lack of this information is not surprising as the systemic educational reform, as well as a draconian civil service reform, are still in the design stage--characterized by changing scenarios, differing opinions, uncertainty, and lack of documentation. Given this climate of variability, the analysis presented below can only be tentative and illustrative. It is strongly suggested that PAAD design allow for adapting MOE Planning Unit's projection model to fit updated parameters. More important is the need for the government to produce a recurrent expenditure budget to complement its externally-funded five-year investment plan budget, in order to demonstrate the magnitude of expenditure required by the government to support the reform.

Economic Appraisal and Justification

The economic feasibility of investment in Uganda's educational system can--in principle--be assessed at multiple levels. Lack of data, however, constrains most quantitative analysis. Nonetheless, there are some indications of economic viability

Returns to Primary Education

A number of studies done in Africa show high social rates of return to primary education (averaging 26.6 percent), followed by secondary education (17.4 percent) and higher education (12.4 percent).²⁵ The general pattern shows rates are higher at the

²⁵Psacharopoulos, G. and M. Woodhall, Education for Development: An Analysis of Investment Choices. New York: Oxford University Press, 1985.

primary level and diminish at secondary and tertiary levels of education. A similar pattern is evidenced in Uganda. A 1965 study found the returns to primary education at 66 percent, compared with secondary education at 28.6 percent and tertiary at 12 percent.²⁶ Two other studies in the same time period, however, found that senior secondary certification netted between 9 and 50 percent higher benefits than primary education.²⁷

Clearly with the economic upheavals of the 1970s and 1980s, these rates can hardly be considered reliable. As far as can be determined, no more recent studies have been conducted. Neither the recent National Manpower Survey (1989) nor the Household Budget Survey (1990) collected correlated earnings-education level data. Analysis based on civil service salary-qualification scales is meaningless due to distortedly low compensation, severe wage compression, and extra-mural income generation activities.

Given the low level of public funding devoted to education (1.4 percent of GNP in 1990/91), especially primary education, in recent years, it would be difficult to argue that there has been over-investment in education and that marginal returns have significantly diminished. Rates of return from other African countries with similar economic and social profiles indicate that both education and primary education remain good investments. (For example, the return to primary education in Malawi is 8 percent.²⁸) Further, recent research in Uganda found that earnings in the informal sector--traditionally the "refuge" of the less educated--are at least equal to or greater than earnings in the formal sector.²⁹ Informal sector entrepreneurs earn between 5 to 10 times as much as their formal sector counterparts. This last point, however, must be regarded with some caution: in view of the very limited scope for absorption of the additional labor force in the formal sector, particularly because of the freeze on public sector employment, it is the informal sector which has been providing employment for the growing--and increasingly educated--labor force. The 1989 Manpower Survey estimates that 38 percent of permanent employees

²⁶ Journal of Human Resources, 1988.

²⁷ Jolly and Colclough, "African Manpower Plans: An Evaluation," International Labor Review, 1972.

²⁸ USAID, GABLE -Malawi Education Sector Grant, 1991.

²⁹ Manpower Planning Department/Ministry of Planning and Economic Development. "Manpower and Employment in Uganda: Report of the National Manpower Survey" 1989.

have some secondary or college level education, the remaining 62 percent with primary schooling or less. However, the educational profile of the entrepreneurs is relatively low. Fifty-nine percent of heads of enterprises had no schooling and 29 percent had only primary schooling, indicating that in the informal sector, at least, primary education is likely to yield a high return.³⁰

A further argument that returns to primary education remain high is evidenced by the as yet undiminished demand for primary education, despite the low quality of schooling and diminishing wage employment opportunities. Although parents bear up to 90 percent of the costs of education, primary school enrollments doubled between 1980 and 1990, growing on average 6 to 7 percent per annum.³¹ By comparison, the population growth rate is 3.2 percent. Although it can be argued that enrollment growth is a result of imperfect information, this is unlikely, given that enrollment growth continued over a decade of public underinvestment in schooling and dwindling employment opportunities. The growth of private primary schools is also indicative of high private returns to primary education. Many parents, unable to afford public school, send their children to generally unlicensed and subgrade private primary schools. Private primary school enrollments are estimated at 5.3 percent³² of all primary enrollment, but the MOE concedes that this is an underestimate, due to the fact that many private schools are not registered. Given the low quality of education in public and private primary schools alike, it is likely that the economic return to primary education would probably correspond to threshold levels of learning, signalling acquisition of basic literacy and numeracy skills, rather than simply additional years of education. For example, if literacy and numeracy are acquired after four years of schooling, it is at this point that the return to primary education is most probably discernible.

³⁰ In Niger, informal sector entrepreneurs' incomes were positively affected by primary education, with rates of return exceeding 50%. Primary education was also found to enhance the efficacy of apprenticeships. Mingat, A. and Jarousse, J., "Analyse des Coûts et de Financement de l'Éducation au Sénégal," Report prepared for the World Bank, February 1986.

³¹ Nazareth, A. "Projections of Enrollments and Resource Requirements for Primary and Secondary Education 1990-2000: A Pre-Investment Study." A Report for the Ministry of Education, Government of Uganda, April 1991.

³² Ibid. The World Bank 1991 Public Expenditure Review estimates private enrollments are closer to 10%.

The proposed USAID sector grant also focuses on girls' education. Studies of Third World development have consistently shown that female literacy is a key variable in explaining development gains--in agriculture, human fertility, child survival and economic growth.³³ Not surprisingly, there are no data on economic returns to female education or earnings-education level in Uganda, but the significant social impact of primary education justifies investments in programs to increase girls' educational participation and persistence in primary school. The 1989 Uganda Demographic and Health Survey found that primary education lowers women's fertility rates from 8.0 to 7.1 children. Women with some primary education are 40 percent more knowledgeable about contraceptive methods than women with no schooling, and are over four times more likely to use contraception. While there is only a 2 percent reduction in child mortality rates associated with women who have some primary schooling (compared with women who have none), child mortality rates are reduced by 25 percent when women have completed primary school.

Worldwide, economic returns to women's education are equal to or greater than those to men's.³⁴ Despite scant evidence, there is no reason to believe this is not the case in Uganda. Though women account for only 20 percent of formal sector employment, and anecdotal evidence indicates that they earn lower wages, the majority of women--60 percent--work in agriculture where they are responsible for 80 percent of food production. In rural areas, 43 percent of women are illiterate compared with 28 percent of men. Given the association between agricultural productivity and primary education³⁵, targeting girls' education as a program strategy is likely to result in substantial economic benefits.

Efficiency of the Educational Reform. Efforts to

³³ Floro, M. and Wolfe, J. "The Economic and Social Impacts of Girls' Primary Education in Developing Countries," U.S. Agency for International Development, December 1990.

³⁴ Schultz, T.P. "Returns to Women's Education" 1987. Psacharopoulos, G. "Returns to Education: A Further International Update and Implications." Journal of Human Resources 20 (Fall).

³⁵ Lockheed, M. et al, "Farmer Education and Farm Efficiency: A Survey," Economic Development and Cultural Change, No.29, 1980. An analysis of 18 studies in low income countries showed a positive relationship between years of schooling and agricultural output. One study in Africa found that farmers having completed four years of education produce, on average, about 8% more than farmer who have not gone to school. Another study observed that the effectiveness of training offered in conjunction with agricultural projects rose with the trainees' level of education.

identify efficiency gains by comparing pre- and post-reform operations, including improvements such as increased teacher remuneration and supply of instructional materials, are stymied by incomplete data in both phases. Cost analysis of the educational reform is effectively precluded by the lack of forward budgeting information on which to base per-student costs from the government side and lack of information about parental costs and opportunity costs of primary education. Similar problems exist in determining pre-reform costs. Further, the differential between the scant resources expended per student currently and what is being considered would bias the results of cost comparisons.

Enrollment Projections and Resource-Needs Model:

Analysis of the MOE's enrollment projections and resource-needs model indicate that the push for universal primary education--proceeding at an annual growth rate of 5 to 6 percent--by the year 2000 may indeed tax the quality of the system. The model includes few quality indicators to judge whether the reform will improve internal efficiency. Both the percent of grade 7 students registered for the PLE and the percent of students who pass the PLE are held constant over the decade, at 80 percent and 81 percent respectively. Both these rates are, however, higher than historical rates in recent years (fewer than 50 percent register for the exam and of those 50 percent pass), and it is unlikely that they would rise to these levels immediately upon initiation of the reform. The cohort survival rate, the percent of a cohort in grade 1 that remains in grade 7, is expected to improve over time: it rises from 32 percent in 1990 to 43 percent in 2000.

Offsetting increased per student costs in terms of more teachers, texts and classrooms is the increase in the student-teacher ratio, rising from 32:1 to 40:1 within five years. As the greatest efficiency gains and reduction in per pupil expenditures are often derived by increasing the student-teacher ratio, the government could consider raising the ratio to 45:1, about the maximum possible without adverse consequences for quality. This would result in decreasing the number of new teachers and classrooms required. Planning Unit officials indicated that the student-teacher ratio was constrained by classroom capacity, but as in many places there are 50-80 children per classroom and teacher, it is unlikely that this is a valid objection. More problematic is the process of consolidating small and redundant schools, which often are affiliated with different religious groups. The student-teacher ratio will necessarily depend on the MOE teacher hiring and posting practices, with efforts made to equalize those areas that enjoy a surplus of trained teachers with those that are staffed by predominantly untrained teachers, or those that have no teachers at all.

Attrition Cost Index: Because the reform budget question is unsettled and historical cost data unreliable, it is

impossible to satisfactorily calculate costs per cycle, which could be used to derive the rate of return to cost savings associated with the reform.³⁶ However, one way around the lack of cost data is to calculate an attrition cost index which is a ratio of actual years per cycle with ideal years per cycle. (As the same unit cost is used in both the demoninator and numerator, it drops out, obviating the need to assign unit cost figures.) Actual cycle years are defined as the average number of student years of education provided by the education system relative to every graduate produced. It is calculated from a table of past enrollment patterns or a table of enrollment projections. The indicator includes the years of education--including repetition--of the graduates plus the years of education--also including repetition--of all non-graduates.³⁷ Ideal years per cycle are equal to the number of grades in a cycle; for example, the primary school cycle in Uganda is ideally seven years. Although both cycle costs and the attrition cost index assume that graduates are the desired output of education and that graduation rates are acceptable effectiveness indicators, comparing the attrition cost index of the pre- and post-reform stages of the Uganda primary education system provides some measure of the relative efficiency.

The attrition cost index for the post-reform stage is 2.27, using the 1992/93 grade 1 cohorts' projected passage through grade 7. This means that the average aggregate student years per actual cycle is 15.88, more than two times the ideal 7 year cycle. The attrition cost index for the pre-reform stage is 3.47, using historical data to trace the 1980 grade 1 cohort's passage through grade 7. This means that the average aggregate student years per cycle is 24.28³⁸, more than three times the ideal cycle. It is clear that--by this measure--the reform will be more effective than the existing system; it will improve system efficiency by reducing student wastage. However, this result should not be taken too seriously. First, the use of graduates to calculate the ratio is valid only if it is certain what "graduate" implies in terms of cognitive and noncognitive

³⁶ For an example of this method, see the USAID Education Sector Grant PAAD for Benin.

³⁷ Cycle cost is not the average time it takes each graduate to complete the cycles. See Windham, D. "Indicators of Educational Effectiveness and Efficiency," IEES-Florida State University, 1988.

³⁸ The cycle years were calculated on the basis of the number of grade 7 students obtaining the equivalent of first and second class passes, on the assumption that these are representative of the desired achievement level. If third and fourth class passes are included the cycle cost attrition index falls to 2.09.

attributes valued by the market of society. Second, the post-reform index is based solely on projections, which themselves are based on nonempirical assumptions. For example, the 80 percent PLE pass rate assumed by the model is not derived from actual knowledge of the effects of the proposed system improvement, but rather from hypotheses of what these improvements could produce. And finally, the selection of the pre-reform cohort was limited by available student flow data; there was no effort to control for intervening variables that may have undermined the effectiveness of the educational system during this period, such as internal strife and economic upheaval.

IMISS: The IMISS Educational Service Centers will certainly improve efficiency of teacher training. Although reliable comparative cost data once again are not available, some resource and output comparisons, indicative of efficiency gains, can be made. Currently, 50 percent of Uganda's primary school teachers are untrained. The inservice training program offered by the government for Grade III certification is identical to the pre-service model: teachers must follow the two-year course of studies for certification, using an inappropriate and outdated syllabus and sacrificing both salary and income from other activities during this period, as well as incurring other direct expenses, such as travel, etc. (Anecdotal data indicates that most teachers engage in extra-mural income generation activities to supplement their teaching income.) The school also loses its teacher who must be replaced during the period. Consequently, the direct and opportunity costs are high, and the salary differential between trained and untrained teachers is insignificant in absolute terms, although recent MOE actions decompress wages somewhat by doubling trained teachers' professional allowance. The number of teachers willing to undertake this investment, although not enumerated, is low. The ability of the educational system to support replacements while in training is also low.

The IMISS program will provide in service teacher training over the course of several years, during teachers' off-time, such as school breaks, holidays, etc., using specially designed curriculum and materials to increase the effectiveness of the training program.³⁹ Teacher opportunity costs will be drastically reduced. Over the course of seven years, the ten IMISS centers are expected to provide in service training to approximately 50,000 "experienced" teachers (approximately 30

³⁹ Although the details of pre-service teacher training are not yet finalized, it is anticipated that the IMISS model will eventually replace the costly and ineffective existing pre-service model used for new teachers with its more effective inservice program, thus upgrading experienced teachers and training new teachers at the same time.

percent of the current teaching force), who would not otherwise participate in upgrading programs. Although the start-up costs of the IMISS program are significant, the average recurrent unit cost of producing a trained teacher should drop due to more intensive use of TTC facilities and staff under the IMISS system. The existing teacher training system, in addition to being ineffective, is under-utilized, operating at 75 percent capacity and with low student:tutor ratios. If the government continues its initiative to both increase and decompress teacher compensation and teaching is "professionalized" through the civil service reform, the demand for in service training should increase.

Textbooks: Central government expenditures on instructional materials are zero, while local government expenditures are negligible. The provision of instructional materials, such as textbooks and trade books, is essentially the responsibility of local PTAs and parents. If one compares the \$10-15 parents pay per year in educational expenses with the estimated \$11-13 for a basic textbook package (four core subjects, bulk discount included), the magnitude of parental inability to purchase instructional materials becomes apparent. Although we have no information on the effect of textbooks on student learning in Uganda, a worldwide literature search demonstrates that instructional materials--textbooks, teacher guides, library books, etc.--enhance student achievement. Over the past decade, researchers have documented the consistently positive effect of the availability of textbooks and other instructional materials on student achievement in developing countries. There is no reason that a positive effect will not be experienced in Uganda, where few students and teachers have access to instructional materials.

Recurrent Cost Implications and Sustainability. This section discusses three issues: 1) the availability of resources to support the education system; 2) the cost of the proposed reform; and 3) the sustainability of the reform.

There is little question that Uganda must increase its expenditure on education if it is to achieve its targets of both increased access to and improved quality of education at all levels. The most recent data (1989/90) show that education is not the only victim of low government spending. Overall, public expenditure is low and skewed: public spending represents only 12 percent of GDP compared with 30 percent of other comparable sub-Saharan countries, and expenditure on defence at 3 percent of GDP is twice that of comparable countries. While government expenditure on services, such as education and health, averages less than 24 percent (10 percentage points below Kenya, Malawi and Ghana figures), defence receives the highest proportion of the budget--30 percent or four times that of comparable countries.

Not surprisingly, government expenditure on education is meager in contrast with other countries in the region. In 1989/90, recurrent and capital expenditures gradually rose to represent 14.4 percent of budget (up from 13.9 percent in 1988/89 and 12.9 percent in 1987/88), while Kenya spent 24.1 percent. Primary education has particularly suffered, with allocations favoring secondary and higher education. Government provides only 2 percent of per capita GDP for each enrolled primary school student compared to 11 percent in Kenya and 30 percent in Ethiopia. In 1989/90, less than 1900 shillings per pupil (approximately \$1.90) was budgeted at the primary level, compared with 430,000 shillings per student at Makerere University--225 times as much. Without funding from other sources the primary education system could not survive. Parental contributions, estimated between 10,000 and 15,000 shillings per year on average, provide up to 90 percent of recurrent and capital expenditure on primary education. Although government accounted for only 1.4 percent of GDP expenditure on primary education in 1990/91, parents bring total primary expenditure up to 4.3 percent of GDP, slightly less than the African average.

Given the balance of payments problem, fiscal restraint has served to keep government expenditures low. Although 76 percent of the government education budget goes for recurrent expenditure, resources are inadequate to meet realistic costs of education. Rough estimates indicate that even to provide minimum reasonable quality of primary education, parental and government expenditure must be increased five times.⁴⁰ Yet parental inability to shoulder more of the burden is clearly evidenced in the large portion of out-of-school children, high attrition rates, and the growth of less expensive private schools. Private costs are likely to increase due to the increasing number of children orphaned by the AIDS pandemic. Consequently, given that parents are unlikely to be able to continue to assume the same percentage of financing, government expenditure would have to increase twenty times.⁴¹

Where will these funds come from? Both the EPRC and policy dialogues with the government point to several sources. Macroeconomic growth leads the list. But with the most favorable

⁴⁰ World Bank, "Public Choices for Private Initiatives," Volume II, February 1991.

⁴¹ Anecdotal evidence indicates government pays one-tenth of the costs of primary education. If unit costs of education were to expand five times and parental contributions remain fixed in absolute terms, the amount government would have to pay would increase unevenly to twenty times current government expenditure per child.

growth rates pegged at 5 percent, it is unlikely that commensurate increases in the education budget can do little more than offset the recent primary school growth rate of 4.5 percent. Increasing the revenue base through taxation is a centerpiece of the EPRC report. Certainly there is scope for improvement: at 8 percent of GDP, Uganda has one of the lowest revenue collection rates in Africa. To date, however, government efforts have resulted in a relatively minor increase of 3 percentage points, and attempts to tax bank accounts a few years ago resulted in a major loss of confidence in the banking system.

Reallocation within the overall government budgetary envelope appears most promising. (See Appendix III for table.) Most policy analysts have targeted the generously funded defence sector as the budgetary source. The 1991/92 budget shows the defence budget at 2.7 percent--down from 7 percent of GDP in the previous year--with the share of education surpassing that of defence for the first time. While there is room for doubt that defence will be permanently curtailed, given continued unrest and border skirmishes in some regions and the difficulty in reducing military personnel as part of the civil service reform, there has been improvement in the educational budget in recent years. Since 1987/88, the proportion spent on education of government expenditures has risen from 11.9 percent to 15.2 percent in 1991/92, and to 3.6 percent of GDP in the current budget. Education's share of government spending for its recurrent, development and nationally financed capital budgets totalled 15.6 percent (actual) in 1989/90, remained at 15.5 percent (actual) in 1990/91, and rose to 20 percent (budgeted) in 1991/92. Government planning documents target between 20 and 35 percent for education of total budget by the end of the decade.

Reallocation within the educational budget to primary education also promises to broaden the resource base, although data from 1988-1990 present a mixed picture. From 1987/88 to 1989/90, central government expenditure rose from 17 percent to 29 percent on primary education. As higher education (including Makerere University) expenditure also rose in the same period from 15 percent to 23 percent, secondary education was the loser, falling from 37 percent to 17 percent. In 1989/90, 45 percent of the recurrent budget was allocated to transfers--non-instructional student subsidies at the secondary and tertiary level. The government has made some moves toward eliminating secondary level boarding schools, and at Makerere a token student allowance has been eliminated. Other recent efforts at improving system efficiency include reduction of the number of teacher training colleges from 94 to 69 with plans for additional consolidation to 36, and a comprehensive census of teachers and schools to eliminate "ghosts" from the payroll, and a modest increase in teacher salaries and allowances.

Determining the costs of the proposed reform to the government is

problematic for several reasons. First, the program and areas of emphasis have not yet been finalized, and it is uncertain what the final program will look like. Second, while a five-year investment program for donor support has been costed, relatively little has been done in estimating recurrent expenditures associated with the revamped system. As some of the proposed investment projects are unlikely to be implemented (eg. distance education), it becomes even more difficult to determine recurrent cost implications for the government. Third, little information exists about the costs borne by parents. Assuming that parents can afford to pay little more than they are currently, the government can not count on the same proportion of private funding and must adjust its estimates upwards.

Finally, the issue of teacher compensation remains unsettled. The MOE has recently raised primary teacher compensation (salary and allowances) to 15,000 shillings/month and is contemplating adding an increment of 20,000 shillings/month, for a total of 35,000 shillings/month which is still well below a living wage (ranging between 50,000-70,000 shillings/month). This would more than double the salary bill for primary education, which in 1989/90 and 1990/91 represented about 70 percent of the recurrent primary school budget, requiring the budget to increase 107 percent at the outset of the reform, assuming salaries represent 70 percent of the recurrent budget. The Report of the Public Service Review and Reorganization Commission (1989/90), concluded 70,000 shilling/month is an appropriate wage and indicated that such an increase would exceed total government recurrent expenditures. To cover primary teacher salaries alone, the primary education budget would have to quadruple in size.

The search for the government's forward budget resembled the hunt for the mythical--and non-existent--snark. Three different budgets existed, but only the one prepared by the World Bank provides adequate basis for analysis. For example, a 1989 review of the budget presented in the draft EPRC report showed that it had seriously underestimated both capital and recurrent costs by about 70 percent. The authors concluded that it was unlikely that the government could sustain costs of the magnitude implied by the initially recommended reforms which included a complete rehabilitation of the physical infrastructure. More recently (June 1990), the MOE Planning Unit projections concluded that by 1998/99 the government would be able to assume full responsibility for covering existing, as well as recurrent and capital, costs of the reform providing the economy grew by 5 percent, government revenue increased to 20 percent and MOE budget reached 25 percent. The second assumption is unlikely. Further, the plan notes that the average annual EPRC recommendations are 500 times the 1989/90 development budget and the recurrent budget would need to increase 750 percent.

The sustainability analysis prepared by the World Bank for its

October 1991 Staff Appraisal Report has estimated that the government would have the capacity to meet recurrent costs of the existing program and of new investments by 1996/97, assuming the economy grew at 5 percent, the budget deficit declined by 2 percent, government revenues reached 20 percent and MOE budget increased to 20 percent. It appears they may have underestimated in three respects.⁴² First, while they presume an annual 3 percent growth rate due to increases in the size of the sector, projections indicate that enrollments are likely to grow 6-8 percent annually, which implies a diminishing per pupil expenditure. It is unclear if the estimated recurrent expenditures compensate for this. Second, they assume a 5 percent annual growth rate in salaries due to increases in real wages and teacher upgrading. Assuming that the salary line item used in the World Bank analysis does not provide for additional salary increases⁴³, at this rate, teacher salaries would have progressed to about 25,000 shilling/month at the end of the decade, 10,000 shillings less than the monthly average the MOE is currently considering, far below a minimum living wage, and even more distant from the 70,000 shillings recommended by the Public Service Review Commission. A complicating factor with cost implications is that the estimated primary school teaching force may prove larger than expected--100,000 teachers rather than 86,000 once ghost employees have been removed. From this perspective, the World Bank's projected deficits in the early years of the reform are likely to be much greater. Finally, the estimated recurrent cost of new investments is 400 million dollars over the ten year period. This does not accord with the Planning Units' estimate of 846 million dollars for the same period.

If we accept World Bank assumptions about the budgetary envelope using its more conservative scenario, but re-adjust salary projections to more than double (2.33 multiplier) in 1992/93 to reflect a minimum raise of 20,000 shillings/month with an 8 percent annual increase thereafter, we find that the government is not likely to be able to sustain the recurrent costs of the reform until the tenth year of the reform, 2001/02 rather than Year 6, 1997/98. This, of course, is a conservative estimate as the teacher compensation increase does not approach a living wage and no allowance has been made for the possibility of a larger

⁴² This critique is tentative and made without having had the opportunity to discuss the sustainability analysis with the World Bank team. Unfortunately, no one in the MOE was able to clarify the assumption underlying the model. Further clarification is required.

⁴³ Comparisons with MOE salary estimates for 1991/92 would indicate that the World Bank salary estimates do not allow for additional teacher compensation increases.

baseline teaching force.

Although there is a great deal of uncertainty surrounding the costs of the reform, it is clear that the government will require external funding to support the investment and associated recurrent costs to at least the end of the decade. The October 1991 version of the Five-Year Investment Plan presents a \$309 million multi-project proposal, for which the government is turning to donors to finance. So far, only the World Bank and USAID have proposed assistance. Here alone, it appears that the financing gap will exceed \$200 million. However, the recurrent costs associated with USAID's project interventions are relatively low (lower than the start-up costs associated with the project) and easily fit within the projected budgetary envelope. As the government comes to grips with the immensity of its proposed reform, it will need to pick and choose amongst the various options. The USAID education sector grant and the World Bank Credit will, in tandem, help the government focus on the sustainability issues and set priorities and the direction the reform will take. The proposed USAID program itself is multi-faceted, and its interventions--particularly the IMISS centers--will provide maximum leverage for system-wide change and impact. Both the program conditionalities and a continuing USAID dialogue with government will encourage it to place priority on increasing teacher compensation and the ongoing support and replication of the IMISS centers.

Commitment of the Ministry of Finance. As the reform has not yet been made official, the Ministry of Finance has not approved an associated budget. Preliminary documents have been forwarded to the Ministry of Planning and Economic Development for its review and recommendation to the Ministry of Finance. The MPED has indicated that its documentation is incomplete and intends to work with the MOE in the near future.

The budgeting process in the MOE is characterized by a piecemeal approach. Budgeting of capital expenditures is done by the Planning Unit based on requests received from operational departments and institutions. The capital budget is vetted--and traditionally halved--by the MPED and sent on to the Ministry of Finance. The recurrent budget is prepared by the MOE's financial undersecretary and forwarded to the MOF. The lack of coordination of recurrent and capital budget preparation is evidenced by the lack of a comprehensive forward budget for the reform. Part of the World Bank assistance is aimed at rationalizing the planning process by training staff at the Planning Unit. A government-wide budgetary planning reform process is underway to eliminate coordination and planning problems. For example, budgetary estimates seldom reflect the amounts received by the MOE. In 1989/90 the total actually spent from the recurrent education budget was 18 percent less than planned, and 10 percent less in 1990/91.

Resolving the question of teacher compensation will be challenging. Although the MOE recognizes this as a central issue in moving the reform forward, the Ministry of Finance may not prove as sympathetic. Recent discussions between the two ministries resulted in the MOF asking where the funds would come from. Without a well considered budget, it is unlikely that the MOE can effectively make its case.

As it is unlikely that the MOE will have finalized their reform package and budget before the completion of USAID design work, it is important that the PAAD team work with both the MOE and MOF to determine government commitment.

Pre-PAAD Studies. As noted throughout the above discussion, economic analysis is seriously constrained by the lack of data and the fluidity of the reform plan, including the lack of a forward budget for recurrent government costs. Groundwork for PAAD economic analysis should include:

- (1) Revised and updated costing of the reform according to government priorities. This data is required in order to determine the financial cost of the reform and its sustainability. The task is complicated by the lengthy approval process of the White Paper and the scope of the reforms it calls for without prioritizing options.
- (2) More concrete data on non-government costs of education, such as parent and community costs, as well as opportunity costs associated with primary schooling. These data are required in order to determine the economic cost of the reform.
- (3) Analysis of the elasticity of teacher supply, i.e., what level of compensation will attract qualified students to the teaching force, cause them to remain there, keep them from moonlighting, and induce them to participate in in service training programs. This will permit a better estimation of the funds required to effect quality changes in the teaching force, and subsequently to determine recurrent costs and sustainability.

The PAAD analysis should include: the calculation of the rate of return of cost savings occasioned by efficiency gains associated with the reform; a cost-effectiveness analysis of the IMISS program compared with the existing teacher training program; and--if data collection permits--an analysis of the returns to primary education. These pieces would then form the basis for carrying out an analysis indicating what the returns to Uganda are of the increased costs to Uganda of the proposed reforms.

Social and Gender Analysis

Introduction⁴⁴. Stakeholders in the program include individual beneficiaries-- parents, teachers and student--as well as ministerial, district, and school-level institutions⁴⁵.

From a social perspective, the following questions arise:

What is the current experience of individual stakeholders?

What are their likely attitudes towards the proposed reforms?

What are the likely consequences for different groups of people in Ugandan society?

What indirect benefits can be expected?

What is the likely opposition to the program?

Background. Once considered the "pearl of Africa" in terms of the quality and access of the populace to education, Uganda now faces a crisis. Fifty percent of the school-age children in Uganda never attend school⁴⁶. Though in primary-grade one 46

⁴⁴ This analysis is based upon pre-PAIP field work undertaken by USAID, World Bank education sector reports, Ministry of Education Statistics, the Uganda Women's Needs Assessment conducted in 1988, the National Household Budget survey conducted in 1989 and district studies undertaken by masters of education students at Makerere University. The national surveys excluded some districts in the North because of the uncertain security situation prevailing at the time and the sampling frames for district studies were not statistically valid. Consequently much of the information is anecdotal. Key issues concerning teacher motivation and opportunity costs for boys and girls primary education should therefore be verified.

⁴⁵ Institutional stakeholders include: Central Government Ministries (the Ministry of Education, The Ministry of Local Government, the Ministry of Women's Affairs, the Ministry of Finance and the Ministry of Labor); District political and administrative bodies (District Education Office, District Development Committee, District Finance Committee, and Resistance Councils); and school level bodies (IMISS Center Management Committees, School Management Committees and Parent Teacher Associations). They are discussed in the institutional analysis.

⁴⁶ National gross enrollment rates in primary school are 70% however 17% of those children are repeating a grade (MOE statistics 1990).

percent of the students are girls, the proportion drops to 38 percent by primary-grade seven. Forty-nine percent of primary teachers are untrained and 38 percent are undertrained, lacking the basic literacy and numeric skills they are expected to impart to their students (Ministry of Education statistics, 1989). In addition, the high domestic-inflation rate has led to pervasive erosion in the value of government support to education.

On the positive side, Ugandans clearly value the education of their children, as demonstrated by their willingness to construct schools and contribute substantial and ever-increasing resources to support schools. As a result, enrollment rates doubled between 1980 and 1988 (Kajubi 1991). Communities, parents, and head teachers have shown remarkable resolve and entrepreneurial skills to devise creative and effective ways of generating the support needed to keep schools functioning. In effect, communities have taken direct responsibility for the education of their children. Parents, the principal stakeholders in primary education, are to a large extent now responsible for education and are therefore vested in any changes proposed. Studies undertaken by the government, World Bank and USAID indicate that the proposed reforms will have broad-based support from these stakeholders (Government of Uganda 1989, World Bank 1991, Moskowitz 1991, USAID 1990,1991). Their support will contribute substantially to the sustainability of the effort.

Despite the desire to send children to school and the commitment on the part of parents to shoulder up to 92% of the cost of school⁴⁷, the quality of basic education services in Uganda today is far lower than it was at Independence. Enrollment rates have stagnated and the relevance of primary education is questioned. Schools are often little more than open rooms with mud floors and walls, lacking windows, permanent roofs, furniture, and supplies, and often having only part-time teachers. This is especially true in rural areas. Consequently, teachers, parents, and students obtain minimal returns to their investment of time and resources.

⁴⁷ The actual contribution of parents varies according to location (both urban/rural and regional) and their socio-economic status. There are no standardized expectations across the nation or within districts and fees levied by Parent Teacher Associations change each term in line with their plans for their school and inflation (Moskowitz: Appendix C, 1991).

Individual stakeholders and beneficiaries.

Parents. Eighty-nine percent of Uganda's population lives in rural areas, earning a livelihood from agriculture and animal husbandry (Government of Uganda July 1991). Seventy percent of the entire population lives in poverty with 25 percent living in absolute poverty (Obbo and Southall 1990). Average monthly expenditure (including consumption of own production) is 53,346 Ugandan shillings (Ush) (\$US53) in urban and 31,645 Ush (US\$31) in rural areas, though there are significant regional variations.⁴⁸ Literacy rates also vary between regions and across gender lines, with women being the most disadvantaged. National literacy rates are 67 percent (74 percent for men and 60 percent for women)⁴⁹.

As they pay the majority of the costs of primary education, parents are key stakeholders. While it is not in all cases true that the higher the cost, the higher the quality, education has increasingly become a price-discriminating market. Given the relatively stagnant character of real incomes in rural Uganda, rising school fees have become a major burden to all families. The average cost of lower primary education in urban areas is estimated at 52,000 Ush per year and in rural areas at 38,000 Ush per year. Upper primary costs average 61,000 and 58,400 Ush per year respectively in urban and rural areas amounting to approximately one twelfth of a household's annual expenditure per student (Government of Uganda February 1991, June 1991). While traditionally school fees were paid by men, as the cost has increased, women have had to take on some of the responsibility for meeting them. Seventeen percent of the women interviewed during the Uganda Women's Needs Assessment indicated that they were solely responsible for school fees, and another 17 percent indicated that they assisted their husbands in meeting the costs (Nalwanga-Sebina et al. 1988).

Efforts to keep fees affordable for the majority of parents have resulted in a decline in educational quality (Obbo and Southall, 1990). If this trend continues, the opportunity costs of sending children to school may outweigh the perceived or anticipated benefits, and parents will stop struggling to send all their

⁴⁸ Monthly total consumption expenditure per household is highest in the central region where it averages 41,334 Ush and lowest in the North averaging 22,652 Ush (GOU, February 1991).

⁴⁹ 26% of the population (29% of the women and 22% of the men) in the Central region are illiterate. 36% of the population (43% of the women and 29% of the men) in the East are illiterate. 38% of the population (46% of the women and 29% of the men) in the West are illiterate. 39% of the population (53% of the women and 26% of the men) in the North are illiterate. (GOU February 1991)

children, especially the girls, to school⁵⁰.

Boys' education has traditionally been given a higher priority within households than girls, because at marriage girls leave the family and are expected to assist their husbands' clans. Boys are therefore seen as potential workers, while girls are considered dependents. Evidence from the needs assessment indicates that this trend is changing. Thirty-three percent of women with daughters in school stated that educated girls were more likely than sons to help them in the future (Nalwanga-Sebina et al. 1988). Nonetheless, if households have insufficient funds to educate all their children, boys continue to have first call on available resources (Kajubi 1991).

Parents value education as an investment for their old age (Government of Uganda 1989 & USAID 1991). They expect their educated children to provide the household with an exit from poverty. Despite the limited access to further educational opportunities following primary school, (only 10 percent of Uganda's children progress to secondary school)⁵¹, and the slim chance that even if qualified graduates will obtain a good position (both in terms of remuneration and status), parents continue to have these goals for their children. They believe that if some members of their household acquire readily marketable skills, such skills will provide profitable linkages with the external world in the long run. Education is therefore expected to widen the household's economic radius.

One consequence of parental emphasis on educational achievement is that the majority of parents (in both urban and rural areas) judge schools according to their primary-leaving-examination (PLE) pass rates (Ministry of Education personal communication). But parents have also expressed concern over how little of use their children learn and how run down schools are (Ssewanyana 1990, Nalwanga-Sebina et al. 1988). Indeed, the Education Policy Review Commission (EPRC) noted a national public outcry that education alienated children from their communities, and left them with no practical understanding of the interests and aspirations of their parents or practical skills (Government of Uganda 1989).

⁵⁰ In order to understand parental motivation for sending children to school, additional pre-PAAD work should be undertaken to ascertain the opportunity costs of education for both boys and girls in Uganda. The information we have been able to obtain is anecdotal but suggests that while school fees are stated to be the primary barrier to a child's education, parents would be willing to obtain sufficient funds if opportunity costs were lowered.

⁵¹ MOE statistics for 1989.

By improving the quality of education, we expect that parents will obtain an increased return on their investment. Through its IMISS component, the program will reach approximately 40 percent of the primary schools in Uganda. If successful, it could cover the country over the next decade. However, the impact of improved quality for children entering school in the first year of the project will not be realized until after the project is completed.

Increasing teachers' salaries may also reduce the burden on parents for paying teacher supplements. However, as the amount paid by parents varies over time and from school to school, and as it is not clear how much extra teachers will demand or parents will be willing to pay once salaries are raised, the degree to which parents' costs will be reduced is uncertain.

Teachers. Teachers are currently paid 21 to 29 percent of the estimated living wage⁵². Their low socio-economic status is reflected in their salaries, which have been below subsistence level for over a decade, leading to a decline in respect for, and the status of teachers.

In 1958, teaching was the profession of first choice for university graduates (Kitchen 1962). Today teaching is seen as an occupation of last resort. Most teachers regard their employment as temporary, to be undertaken until they can secure something better. A study undertaken in Apac and Lira districts concluded that primary teachers with less than Grade V qualifications would not leave teaching, even if conditions didn't improve, because they have no other choices. Females wanted to leave teaching more than males. This may reflect a lack of employment opportunities for men in rural areas rather than a commitment to teaching (Opon 1986).

In relatively illiterate rural communities, teachers continue to command some respect and are frequently elected as representatives to Resistance Councils, but their economic circumstances diminish that respect. This situation has been exacerbated by the "culture of the Amin era", which significantly enhanced the position of businessmen and women to the detriment of the teachers. In urban areas, where teachers' economic position is better as Parent Teacher Associations (PTAs) can offer better terms and conditions, teachers are less likely to be

⁵² These figures pertain only to teachers Government salaries excluding the supplements they receive from PTA's. They assume the new salary scales instituted in October 1991 which gave teachers a 40% pay rise and additional professional allowances dependent upon their qualifications. They also assume a living wage of Ush 70,000 per month which is the figure being used as the basis for the current civil service reform negotiations.

elected to positions of influence since they must compete with other educated people for such positions.

In addition to the impact on morale of the decline in respect for teachers, their ability to work effectively in the classroom with meager resources is hampered by poor living conditions. Teachers are forced to find additional sources of income in order to survive, which results in high levels of teacher absenteeism. A 1988 survey indicated that 58 percent of all civil servants engaged in agriculture, others teach in two or more schools at the same time, and/or engage in trading (UNICEF 1989). Serious teaching is often confined to private tutoring, which only the comparatively wealthy can afford (Evans and Odaet 1991).

Teachers are subject to constant public criticism of their performance and behavior⁵³. Sixty percent of the teachers interviewed in Apac and Lira districts indicated that they were not accepted as professional experts (Opon 1986). Likewise in Jinja, parents believe that their children fail because the teachers don't know enough (Adwete-Ocen 1990). Teachers blame the failure of their profession on undercompensation and a lack of teaching materials, training, and adequate housing, semi-permanent classrooms, insufficient career-advancement opportunities, and weak support services (Opon 1986, Evans & Odaet 1991).

The proportion of untrained primary teachers varies considerably between districts, ranging from 5 percent in Kampala to 72 percent in Hoima. Excluding Kampala, 60 percent of the teachers in the central region are untrained, 48 percent in the North, 5 percent in the West and 44 percent in the East (Evans and Odaet 1991). Many more are underqualified. A study conducted by ActionAid in Mubende district concluded that only 19 percent of the teachers were found to be properly qualified and, of the teachers tested for upgrading, only 39 percent were considered trainable (Moskowitz 1991)⁵⁴.

⁵³ Much of the criticism is justified: newspapers are constantly reporting that teachers are absent from their duties much of the time; that they have been engaged in corruption (a direct result of low Government salaries); that they have either exacted severe corporal punishment or have sexually abused their students. However, not all teachers are unmotivated or the primary school system would have collapsed entirely.

⁵⁴ Adwete-Ocen has shown that in Apac and Jinja teacher education programs influence learning achievements of pupils in urban but not in rural areas. She argues that training is a necessary but insufficient condition to improve the learning environment. To get the best out of teachers she maintains that they need good physical working conditions, work appreciation and

Of the total number of primary teachers registered in 1989 only 29 percent were female, of whom 39 percent were untrained. Fifty-nine percent of the male primary teachers were untrained indicating that men are more likely than women to be hired as teachers even if they are unqualified (Ministry of Education statistics 1989).

Schools' administrative and profession hierarchies reinforce women's inferior position in society through lack of promotional and training opportunities for female teachers. In addition, because male colleagues are usually in charge, giving instructions to their female counterparts, the patterns of interaction between men and women at home are repeated at school. Qualified women teachers should be promoted and encouraged to become role models for their students.

The current primary-education system cannot attract qualified teachers, train new teachers, or provide proper inspection of schools. In the ten districts covered by IMISS component of the program these weaknesses will be addressed. In addition, teachers' salaries will be raised and textbooks will be supplied on a nationwide basis. We assume that these measures will help restore respect for the teaching profession, a necessary precondition for both motivating teachers and encouraging parents to continue to send their children to school.

In order to ensure success of the program, we need a better understanding of the relationship between salaries, support services, and materials, and teachers' behavior. Will teachers' terms and conditions of service improve enough to affect their morale and increase the time they can spend teaching? Will the incentives offered provide sufficient motivation for teachers to attend courses and to put into practice what they are taught⁵⁵?

support (Adwete-Ocen 1990). While the USAID program will not address improving physical plants in rural areas, both the PAPSCA program and the proposed World Bank education sector credit will address these needs.

⁵⁵ The testing teaching modules and evaluating teachers on going performance will be a critical element of the IMISS project. This is of particular concern given the recent UNICEF evaluation of their School Health Education Project which showed that students taught by teachers who had gone through health education training had a lower level of health knowledge than those who had been taught by teachers without the benefit of training (GOU August 1991). Science Training Equipment Technology Unit directors also indicated that on the job training was not successful particularly because of low teacher retention rates (Moskowitz 1991).

Will the terms and conditions be sufficient to keep teachers who have acquired additional skills that make them more employable elsewhere? Can the present appointment and promotion system be made more transparent, more equitable, and provide incentives for improved performance?

Students. Currently most children fail to receive any lasting benefit from the education offered (Government of Uganda March 1991). School leavers and graduates typically do not find the salaried jobs anticipated, due to both economic disintegration and high population-growth rates⁵⁶. In addition, rote memorization, the prevailing teaching methodology, does not prepare students to take initiatives or to create jobs for themselves.

Economic factors affecting educational opportunity and persistence in school include: school costs and user fees; education losing its economic value; and school attendance affecting the economy of the family. The principal school related determinants of both attendance and persistence are poor learning and repetition (World Bank 1990). The Uganda Women's Needs Assessment discovered that 11% of the parents interviewed indicated that they left school out of lack of interest (Nalwanga-Sebina, et al. 1988; see also Jingasu 1969, Katusabe 1989). Others leave school to engage in income generating activities in agriculture, fishing and smuggling which are perceived to be better economic alternatives (Odama 1987)⁵⁷.

While lack of school fees and user costs are universally considered the major constraint to more children attending school, anecdotal evidence allows us to assume that, if the opportunity costs of education decreased, more parents would allocate resources to education. In addition, it is reasonable to assume that, if the quality and relevance of education were to be enhanced, students would be more motivated to attend classes and to stay in school. In order to verify these assumptions, we need more information on both parental and students' motivation as well as the opportunity costs of educating both boys and girls in different regions.

Girls. Except for the Central region, where the Buganda have always valued girls education and girls make up 57 percent of the primary school population, girls are less likely

⁵⁶ The population growth rate in Uganda is estimated at 3.2% per annum.

⁵⁷ Agriculture, fishing and trading are significant competitors to education. This is particularly true in the Northern Region and in districts bordering Tanzania and around Lake Victoria (Moskowitz 1991, Odama 1987).

than boys to go to school or continue in school (Ministry of Education statistics 1989).

A 1988 study by Bitamazire shows that 59 percent of the girls who entered school had dropped out by primary-grade seven with major attrition points being between grades one and two and between grades six and seven (cited in UNICEF 1989). Girls are also more likely to be absent from class, to drop out rather than repeat, and to spend less time on studying, because of greater household responsibilities. These factors contribute towards girls' comparatively poor performance on the PLE, which reinforces cultural attitudes that education is of little value for girls (UNICEF 1989). In addition to the care-taking role women have in society, girls are socialized to have lower aspirations, to be shy around boys, and not to compete with them; consequently, teachers call on boys to answer questions and to lead groups. The traditional professions or careers to which women aspired 50 years ago (nursing and teaching) continue to predominate (Nalwanga-Sebina et al. 1988).

Female attendance in schools is lowest in the North (36 percent) where both cultural and religious barriers keep girls out of school⁵⁸. In the West and East girls' enrollment rates are 45 percent and 46 percent respectively (Ministry of Education statistics 1989). The under-enrollment of girls remains a critical problem especially given the relationship between girls' education and reducing fertility, increasing the age of marriage, reducing infant and child mortality, and increasing women's productivity on the farm and in the labor market. The social and cultural determinants behind parents' reluctance to encourage girls to remain in school, apart from the obvious economic ones, need to be clarified. While 83 percent of the women interviewed for the women's needs assessment indicated that lack of fees were the main reason for girls either not going to school or discontinuing their education, only 64 percent of the girls who were reported to have dropped out of school did so because of lack of fees. Twelve percent were withdrawn from school to prepare for marriage and 8 percent because they became pregnant (Nalwanga-Sebina et al. 1988, Jingasu 1969, Odama 1987). These figures raise questions about the opportunity cost of girls' education, which need to be answered before mechanisms for improving girls' attendance and persistence in school are worked out.

⁵⁸ In Arua and Karamoja, Odama reports that sending girls to school can reduce their bride price since education is perceived to decrease girls' abilities to perform traditional household and farming chores (Odama 1987). In addition there is a greater predominance of Muslims in the North who would prefer that girls were educated in separate institutions from their male counterparts.

Equity. The existing primary education system is inequitable because socio-economic status is the prime determinant of who goes to school, particularly who goes to a better quality school. Those with means not only go to better schools, but are more likely to receive additional coaching and/or to repeat grades rather than drop out. Therefore they are more likely to pass the PLE and progress onto higher education where the financial burden on families is reduced as the government pays much of the cost.

Parental wealth also contributes to the availability of qualified teachers. PTAs that are able to provide better housing and higher allocations for staffing and supplies, usually in urban areas, attract teachers; this undermines the quality of teaching in most rural areas. The number of children who are disadvantaged because their parents cannot pay much for education will fall only with long-term improvements in the economy, the school system, and other services (UNICEF 1989). Rural areas are further disadvantaged by lack of reinforcements for education in the local environment, lack of local language texts, greater household and farm chores for both boys and girls, and more primary schools that offer fewer than the official number of grades.

Between regions, access to schools is lowest in the North and highest in the Central region. By restructuring teachers' salaries, supplying instructional materials, and providing teacher training, the USAID program should result in some improvement in the quality of teaching in more disadvantaged areas⁵⁹. The program through its conditionality will also promote a more equitable distribution of inputs, redistribution of central funds according to district needs, and the establishment of standards for appropriate service levels.

While there are no legal gender discriminatory statutes with respect to education, Uganda's women need special help to develop their potential. Increased educational opportunities will help women get the knowledge and skills they need to improve their home environments, increase their cash income, and care for themselves and their children. Longer-term policies that increase women's participation in the labor market will be needed if more girls are educated. In the short term girls' access to primary education should be enhanced by the program.

Spread Effects. Primary education has been shown to have direct and positive effects on earnings. It gives individuals a wider range of self-employment options and allows them to choose

⁵⁹ The initial ten IMISS districts have been selected on the basis of need within each region. See Appendix V for selection criteria.

more profitable alternatives. It increases farm productivity and increases the chances of the children of the poor escaping poverty. In addition primary education decreases human fertility and has intergenerational effects on child health, nutrition and education (World Bank Development Reports 1990, 1991). In Uganda, women with middle and higher education marry four years later than women with no education and are less likely to enter polygamous unions⁶⁰. The average number of births per woman also declines and the desire to stop childbearing rises.⁶¹ In addition, levels of infant and child mortality are 30 percent lower among children whose mothers have completed at least primary education, when compared to children whose mothers have either no education or have not completed primary⁶².

Education is a cornerstone of economic growth and social development and a principal means of improving the welfare of individuals. Due to poor quality and lack of universality of primary education, especially for girls, national efforts to build the human capital base necessary for development have been jeopardized (World Bank 1990).

The program has been designed to halt the decline in the primary education subsector and increase the persistence of girls in education. As such it will contribute towards national efforts to build the human and capital base necessary for Uganda's development in every sector and will contribute towards improvement in the welfare of the majority of Ugandans.

Potential Opposition. The Education Policy Review Commission quotes broad-based popular support for the types of reform being proposed through USAID's education sector program and the Government's agenda for reform will be publicly discussed early in 1992 (Government of Uganda January 1989). It is unlikely that there will be significant opposition to the reform.

There may be some resistance to the emphasis on helping girls, given the number of disadvantaged groups whose children are de

⁶⁰ 54% of women in Uganda marry before the age of 18. (GOU October 1989)

⁶¹ The level of use of contraceptives is 18 times higher among women with higher education than the rate for those with no education, only 2% of whom use any contraception. (GOU October 1989)

⁶² Under 5 mortality rates for children whose mothers have no education was 198.4 in 1988, for children whose mothers had some primary it was 195.5, for children whose mothers completed primary it was 153.6, for children whose mothers completed middle school it was 138.6, and for children whose mothers had higher education it was 97.1%. (GOU October 1989)

facto excluded from primary education. However it is generally recognized that girls should have equal access to education (Abidi 1990, Kawesi, 1990, Kavulu 1991). Potential opposition from higher education to a greater share of resources going to primary education will be partially offset by an increase in the overall education budget and partially offset by support from other donors. Similarly private schools may plead for instructional materials but will be excluded if they remain outside of the government educational structure⁶³.

Summary. Parents, teachers and students as the major stakeholders in primary education are also the principal beneficiaries of this program. Their current situation is of grave concern to the nation with the quality of education declining and inequities within the system increasing. Our analysis has shown that initial efforts in the primary education subsector must first concentrate on improving the quality of education. As a result it should be recognized that the program will not increase access to primary education for the majority of disadvantaged groups in society. Specifically there is no component to assist the victims of war or children orphaned by AIDS. However, through targeting many of the program resources to the most disadvantaged districts within each region and providing special assistance to girls, access to fundamental quality education for these groups will be enhanced.

Anecdotal evidence allows us to assume that by increasing the quality of education, parents will be more willing to direct their resources towards educating their children and that children will be more interested in learning what the schools offer. However, more information on the opportunity costs of sending children, especially girls, is required to design an intervention that helps girls. Once designed the intervention will require testing to ensure that it is appropriate and effective.

Finally we assume that by enhancing the terms and conditions of service for teachers, through raising their salaries, providing instructional materials, training and support, they will become more effective. While these are issues teachers have raised as being the root cause of the failure of their profession to pass on learning to students, we do not know the degree to which change will be necessary in order to make an impact.

Recommended studies.

- (1) How can girls' persistence levels in primary school be

⁶³ Approximately 4% of Uganda's primary students are in private schools (MOE statistics 1990), but this is acknowledged to be substantially under-reported.

raised? This study should determine the opportunity cost of girls' education. Specifically why parents don't send their girls to school; why girls drop out of school; what the elasticity of demand for girls' primary education is; and what differences are there between regions and between different groups of people. If school fees and user costs were paid, would more girls both go to school and persist in school or are there other binding constraints? In addition, the study should determine both the type of assistance that should be provided to girls and what mechanism would be most appropriate for administering it.

(2) What is required to motivate teachers and keep them in the teaching force once trained? This study should determine both why teachers enter the teaching force and what constrains their performance as teachers. Why do teachers resign? How much of a salary increment is required to enable teachers to work full time at their profession? What is the relative importance of salary versus other rewards? Are conditions in the classroom a binding constraint? How much training and what kind of training is required to improve the standard of teaching? Can standards of performance be applied nationally to the teaching force? Can the career path of teachers be structured to provide additional incentives for training? In addition, the study should determine how these factors vary between urban and rural areas and from district to district.

Political Analysis

This initial analysis of the political considerations of a program in the primary education sub-sector reviews elements of the overall political environment in Uganda that affect the feasibility of the program, suggests factors that facilitate and factors that limit the viability of the program, and, finally, sets out several issues that might be explored in more detail.

Several developments in Uganda's overall political environment appear to increase the feasibility of achieving the policy reform goals of the program. The increasing political and social stability within the country provides, for the first time in decades, the possibility of reversing the decline in the education system. Under President Museveni, Uganda has shown a commitment to policy reform and has sought to maintain good relations with external donors through good faith efforts in policy reform. This record provides a measure of confidence that newly designed reform programs will be implemented with similar good faith efforts. Also, the government has expressed a desire to support the social sectors and articulates a commitment to a more equitable distribution of resources--a political stance that is fully consistent with the proposed sector assistance program.

The following political factors appear to directly increase the viability of the proposed program:

- (1) The government wants to overcome the deep-seated problems in the country's educational system in order to provide the skills and training needed for successful economic development.
- (2) The government has managed an impressive process of consensus building, leading up to its articulation of an educational sector reform strategy.
- (3) The government and the World Bank have cooperated effectively, resulting in the Bank's US\$64 million program for primary education support.
- (4) In the current fiscal year, the government has undertaken new budgetary commitments in the education field that are consistent with the USAID program goals.
- (5) Increased support for education is popular with the public. The Ministry of Education, which would lose some degree of central control under the new direction, appears to support decentralization of the national education system, thereby confirming its local support.

At the same time, some features in the overall political climate present risks to the fulfillment of the program's goals. The two most important risks are the strong position of the military in

Ugandan society and the weakness of the Ugandan government in implementing institutionally complex reform programs. Although the government has expressed its commitment to shifting budgetary resources away from military expenditure, this will not be easily accomplished. The weak implementation capacity of the government limits its ability to ensure that its stated political preferences are reflected in policy and development outcomes.

The following political factors could diminish the likelihood that the program reaches its goals:

- (1) Even if the budgetary resources exist to implement and sustain the program, it is not clear that the Ministry of Education can compel the government to deploy these resources for education rather than other pressing public needs.
- (2) There is a legacy of an elitist orientation to education in Uganda. The USAID program attempts to change this, but the elite may effectively oppose reductions in higher education and other subsectors that would be reduced to balance inequities nationwide. Urban schools, colleges and the university may be able to effectively mobilize to protect their unequal and inappropriate share of national educational resources.
- (4) The Ugandan public sector has serious problems with corruption. It will take time and effort to design safeguards against loss of resources intended to go to schools.

The issues raised in this preliminary analysis should be monitored as the program is more completely designed and implemented. In addition, USAID should identify the effective political and organizational leadership needed to implement the program. Will the Minister of Education be able to play such a role? USAID should also ask whether the salary increases for teachers are consistent with the civil service salary reform, and, if they are not, what effect the discrepancy will have on the project.

Environmental Impact Analysis

The proposed program does not entail construction or any other efforts that would affect the physical environment. Given that the entire thrust of the program is directed at human resource development with no physical facility development, a negative environmental impact determination is anticipated.

COORDINATION BETWEEN HOST GOVERNMENT, USAID, AND OTHER DONORS

USAID Coordination with the Government of Uganda Program and other Donors' Programs

The government plans to present the highlights of the White Paper to all Ugandans through a series of local meetings in Spring 1992. As its major tenets have been presented in terms of the five-year plan, and are unlikely to change, USAID has been able to conceptualize a primary-education project that is in line with government policy. USAID's entry into the primary education sub-sector is timely and its proposed project directly addresses the plan's call for assistance to practicing teachers.

Moreover, USAID is in a strong position to influence the ministry's policy and direction. The five-year investment plan, though detailed, reveals no priorities among the initiatives it presents. With the proposed NPA and technical assistance, the USAID program should provide concerted guidance to the ministry during this critical period of enhancing the education sector.

In proposing to collaborate with the World Bank, USAID is effectively delineating a coherent piece of the IMISS initiative that will be complemented by the Bank's broader program. The whole program takes place directly in the context of the ministry's recently stated goals and plan, and therefore maximizes the opportunities for overall coordination among ministry, USAID, and World Bank activities.

The World Bank appears to be the first major donor to design a primary education program on the basis of the ministry's new plan. By collaborating with the Bank in a major component of its proposed program USAID strengthens its ability to overcome potential obstacles to coordination of donor programs within the ministry, and to put leverage on the government in policy reform.

USAID/Uganda has had preliminary talks with the World Bank and the government on coordinated financing of the IMISS project. As both donors have preferences and restrictions on the types of assistance they give, a detailed plan will be negotiated between the three parties prior to the PAAD. The plan will ensure that all essential inputs are accounted for. In general, the World Bank will provide means for school buildings and equipment, and USAID will finance technical assistance, supplies, and nonproject assistance.

Options for the USAID-Project Implementation

The World Bank operates its programs out of the Project Implementation Unit (PIU) of the Ministry of Education's planning unit. The PIU is now structured to encourage other donors to place their technical assistance coordinators within it.

One obvious option for implementing USAID's project is to place it within the PIU by assigning the project coordinator to that unit. This option is preferred by USAID's principal counterpart in the ministry, the Director of Planning, and appears to be the simplest from a management point of view. It is recommended in view of the intensive coordination that must take place between the ministry and all donors if a coherent set of interventions is to take place.

A second option is to assign the project coordinator to another central office in the ministry such as the inspectorate, which is expected to play a key role in supporting the professional development of teachers.

A third option is to assign the project coordinator to the Ministry of Local Government, which has line responsibility for District Education Officers, who are key in school management and accountability.

A fourth option is to place the project coordinator in one of the district offices selected for the project, assigning local counterparts at the district rather than the central level.

USAID's management study (October 1991) provides information pertinent to decisions about how to implement the project, but the final determination should not be made at this stage of project development. The optimum implementation arrangement should follow further analysis of the actual capacity of each of these units, and the advantages and disadvantages of working in each.

In preparation for the PAAD development, USAID should coordinate directly with representatives of or fund a study of other donors in primary education, particularly ODA, which is funding the MITEP project, and UNESCO, which is funding the BEND project, as both are teacher-training efforts that may merit coordination with USAID's project.

IMPLEMENTATION ISSUES AND CONDITIONALITY

Conditionality

Nonproject assistance (NPA) will be given to the government on the condition that:⁶⁴

- (1) The government increase the salaries of primary school teachers toward a "living wage" level; and the ministry employ, train, and support enough teachers during the life of the project to meet enrollment demands and class sizes of no more than a 1:40 student-to-teacher ratio.
- (2) The ministry provide to all schools textbooks on a 1:3 book-to-student ratio for every primary grade (1-7) in the country in four subjects: English, math, science, and social studies; that the ministry provide additional instructional materials to schools in IMISS districts, and that the ministry base new materials on a reformed curriculum.
- (3) The ministry prepare the in-service training and support programs for IMISS centers, fully staff those centers, implement their programs, and assume recurrent costs by the end of the USAID program.
- (4) The ministry give grants to schools that qualify through their participation in IMISS-center training activities. (Criteria for qualification can be developed during the first phase of the program.)
- (5) The ministry increase the persistence rate of girls in primary school through some form of financial subsidies to alleviate private costs to girls at the grade levels at which their attrition rates are highest. (A pre-PAAD study is required to get a better understanding of why girls drop out of school and of the actual and opportunity costs for sending girls to school.)

Linkages and Schedule

Other than those of the World Bank's Education Credit, no conditionality related to primary education have been negotiated with the government by other donors. The World Bank has decided to rely on its conditionality alone as the basis for their program, though they have expressed strong support for the USAID draft conditionality as critical to the success of both programs.

⁶⁴ Conditions may be modified after completion of pre-PAAD studies and in the course of PAAD design.

The preliminary schedule of conditionality is illustrated in a Preliminary Policy Matrix (see Appendix II). The corresponding schedule of tranching release of funds is in the section entitled "Foreign Exchange and Local Currency Issues," below. The conditionality and tranching have yet to be negotiated with the government, though they reflect the agreements made between the ministry and the World Bank in the Aide Memoire of November 1991. Those conditionalities that come under the jurisdiction of the ministry should be negotiated in conjunction with the World Bank's negotiation of the timing of its assistance.

USAID is willing to take primary responsibility for monitoring on behalf of the World Bank those project components and program conditionalities that overlap.

Actions proposed in the ministry to raise teachers' salaries must be coordinated with the pending civil service reform being negotiated in the context of the Structural Adjustment Credit and the Policy Framework Paper. As teachers are presently a substantial contingent in the civil service, USAID will communicate closely with multi-lateral donors to avoid discrepancies between the ministry's proposed salary adjustments and the adjustments contemplated in the civil service reform.

Project Implementation

Effective implementation of this program will depend as much on the implementation of project components as on the implementation of nonproject assistance. Project implementation is described in the section on the USAID program (above), and analyzed in the institutional analysis section above.

PRELIMINARY MONITORING AND EVALUATION PLAN

Purpose

The guiding purpose of the monitoring and evaluation plan is to track (monitor) the resources put into the project by the ministry and USAID, and to analyze the relationship between the presence of those resources and movement toward the project's objectives and purposes. This is largely a management and formative evaluation function. A secondary purpose is to measure the effect of the various "treatments" introduced by the project on student learning. This is largely a scientific and summative evaluation function. Although these two functions are not incompatible, and they overlap in many ways, summative evaluation is usually more demanding and expensive. In the interest of overall project goals and economies, the cost of evaluation for measurement purposes alone should not become disproportionate.

The project will be monitored along three separate though interrelated tracks: project resources going to districts and schools, non-project assistance, and project outcomes.

(1) **Project resources** such as technical assistance, instructional materials, and grants to schools will be monitored in order to account for USAID inputs. These will be tracked through the districts to the school level, where schools will be held accountable for grants and supplies they receive through the project. (School head teachers and management committees are to be trained in this function.) Data will come from AID procurement documents, IMISS records, and school records. The chief of party will be responsible for this monitoring function.

(2) **Non-project assistance** (and local currency generations) will be tracked according to applicable guidelines and regulations, and through documentation and actions of the Ministry of Education that provide evidence that conditionality has been met. NPA funds and ministry actions will be monitored in central offices, primarily the PIU. The purpose of this monitoring function is to account for the government's meeting conditionality, and to analyze their relationship to achievements of project purposes. The data for this tracking will include ministry records of local currency expenditures and receipts (payments to teachers, fee disbursements to girls), changes in ratios of disadvantaged/ advantaged populations (teachers and students), and demonstration of conditionalities met (see the draft policy matrix in Appendix II). The USAID Education Officer in cooperation with the PIU and the chief of party will be responsible for this monitoring function. USAID will work with the ministry's planning and statistics office to see that required data are part of the educational management information system (EMIS).

(3) The **project outcomes**, or effects, will be monitored and evaluated in order to determine the appropriateness of project resources, movement toward project objectives, and ultimately, the impact of the project on the quality of, equity in, and efficiency of education services (see Objective Tree in Appendix II). This information will be monitored through a longitudinal study of the project's process and outcomes.

Indicators

These outcomes will be measured in terms of four kinds of indicators: teachers' income, stability of the teaching force, school quality, and student achievement.

Indicators of teachers' income will include pooled averages as well as selected subsamples. Indicators of the stability of the teaching force will include the number of teachers on the payroll and their lengths of service. Indicators of school quality will include items such as the quality of the building, numbers of textbooks, number of IMISS-trained teachers, head teacher's management ability, repetition and drop-out rates, and so on. These are not necessarily linked to USAID project inputs. Indicators of student achievement will come from either existing rapid assessment instruments in use or revised Ugandan tests--the former until the latter are available and a reliable transition can be made. Data will be disaggregated by gender.

The longitudinal study will use data collected and analyzed following the third and sixth years of the program's implementation on a random sample of x schools in 5 selected IMISS districts. (See Robin Horn's memo of 5/3/91 on baseline surveys (in Appendix VI) for a discussion of the methodology of such a study.)

The chief of party will be responsible for the longitudinal study, though he or she may delegate this responsibility to another project staff person or to local and/or foreign consultants. The study should take place in the environment of the ministry's planning and statistics office, involving ministry personnel, to increase the likelihood that it becomes a sustained function of that office.

Monitoring and Evaluation Reports will be channeled regularly through USAID. The project's Chief of Party will submit quarterly reports to the USAID Education Officer; each fourth-quarterly report will include the annual report on the longitudinal study, and a synthesis of information from resource tracking and outcome tracking. The USAID Education Officer will submit quarterly reports, including the contents and an assessment of the chief of party's reports, and a synthesis of all three monitoring and evaluation tracks, to the USAID General

Development Officer.

The cost of monitoring and evaluation will be largely that of the longitudinal study (see Horn's memo for description of these costs). The monitoring and evaluation tasks of the chief of party and USAID Education Officer represent no additional project costs.

FOREIGN EXCHANGE AND LOCAL CURRENCY ISSUES

Overview of Proposed Budget

US\$108 million is the proposed budget for the USAID/Uganda education sector program. This combines US\$18.0 million of projectized assistance and US\$90 million of nonproject assistance (NPA). The NPA will be provided in exchange for critical policy reforms in the education sector, and local currency generated will be deposited into a special account to ensure that funds are available to enable the government to meet at least a portion of the expenditures to which they are committing in the reform elements of the program. The government's contribution to the activity will be the equivalent of \$65 million, a contribution in the form of the host country-owned local currency that is generated or otherwise deposited upon disbursement of the \$90 million in NPA resources, less textbook costs. The cost assumptions on which the program budget is based are summarized in the following table:

U.S. DOLLAR EQUIVALENTS (in millions)			
NPA-ASSOCIATED EXPENSES		PA-ASSOCIATED EXPENSES	
20.0	Teachers' salary increase	13.2	Foreign tech assistance
25.0	Textbooks	1.3	Local tech assistance
4.3	IMISS staffing	2.0	Equip IMISS centers
0.7	School grants	1.5	Short-term tech asstc and training
40.0	Girls' persistence		
\$ 90.0	TOTAL	\$ 18.0	TOTAL

Tranching and Uses of NPA Foreign Exchange

The US\$90 million in NPA will be disbursed to the Government of Uganda as it meets successive conditionality elements in the primary education sector (see Preliminary Policy Matrix in Appendix II). The tranching of resources is primarily dependent upon the government's requirements for local currency to support the policy reforms. In the first year, \$22 million in NPA will

be provided, and in the second year an additional \$26 million will be disbursed. NPA for the third, fourth, and fifth years will be at the \$14 million level in each year. (The higher expected disbursement rate in the first two years covers the purchase of the textbooks.) All the NPA will be made available through a cash transfer mechanism, and the bulk of this (i.e., all but the \$25 million for the textbooks) will be made available in a generalized manner for balance of payments support.

PLANNED TRANCHING OF NPA (\$ millions)

TRANCHES	1	2	3	4	5	TOTAL
<u>TOTAL NPA RESOURCES</u>	<u>22</u>	<u>26</u>	<u>14</u>	<u>14</u>	<u>14</u>	<u>90</u>
TEXTBOOK PURCHASE	12	13				25
GENERALIZED USE	10	13	14	14	14	65

USAID is currently exploring three alternative balance of payments support uses for the \$65 million in generalized NPA resources:

- (1) support for the upcoming foreign exchange auction;
- (2) support for Uganda's imports of petroleum products; and
- (3) support for the government's multilateral debt service commitments.

For any given dollar disbursed, these are obviously mutually exclusive alternatives, but all three could be considered over the lifetime of the program.

There are basically three elements on the demand side in Uganda's market for foreign exchange. First, the government has a requirement for foreign exchange to carry out certain activities. These include the payment of debt service obligations, the importation of petroleum products, and other government imports (primarily defense equipment). Second, there are the balance of imports required by the private and parastatal sectors. When the foreign exchange auction begins early next year (see following paragraph), it will cover the bulk of these transactions. Third, there are requirements for foreign exchange for invisible transactions. Generally speaking, invisible transactions are funded through the foreign exchange bureaus, established in mid-1990 in a dramatic liberalization step.

Early in 1992, Uganda will take another important step in its on-going liberalization of the trade and payments regime: the initiation of an **auction system** for purchase of foreign exchange for merchandise imports. The details of the auction are currently being negotiated by the IMF and the government, and

will be clear by the time the PAAD and the PP for this education activity are reviewed. The auction will be operated as a "Dutch" auction, wherein each successful bidder at the regularly convened auction pays the auctioneer (the central bank) at the price that he bids, rather than at the marginally successful bidding price. The supply of foreign exchange for the auction will consist of multilateral and bilateral donor contributions, and it is anticipated that the auction is currently fully financed for at least the first six months of its operation. This situation may, of course, change, and USAID would like to have the option of placing at least a portion of our NPA resources into the auction if that appears necessary.

A second alternative use for the foreign exchange is the purchase of petroleum products. Currently, all petroleum imports are managed by the government, which sells these imports to public and private retailers at the official exchange rate. When the foreign exchange auction begins early next year, the government will continue to manage petroleum imports, rather than allow them to go through the auction. Although the intention of the government is to reexamine this issue after a period of time, perhaps then allowing petroleum to go through the auction, the government believes that petroleum is such a key import that it prefers to see the auction operating smoothly before putting petroleum into the auction. While USAID/Uganda would prefer to see petroleum go through the auction from the outset, we understand the government's worries and do not believe that this is a critical issue at this time. When the auction begins, petroleum will be sold by the government to retailers at the prevailing auction exchange rate, which will be the "official" exchange rate. As discussed earlier, the auction appears to be fully subscribed at the moment, but this is not the case with respect to the government's own foreign exchange requirements. USAID/Uganda has financed petroleum imports in the past, and supporting the government in this manner may, at a given time, be the best use of the NPA dollars.

The third possible use of the NPA to be made available under this program is to allow the government to use it to meet a portion of its debt service commitments, in particular those involving the multilateral agencies. Current estimates of 1991/92 debt service payments to the IMF, the IBRD, and IDA are that they amount to about US\$60 million and, as noted above, the government's own cash flow is exhibiting excess demand. A.I.D. NPA is the most flexible of any external balance of payments support, in that it may be used for debt service to the multilaterals, if Assistant Administrator approval is given. (USAID is currently seeking such approval in AID/W.) It is obvious that the need for such support exists, and use of the foreign exchange from this program for debt service may turn out to be the most appropriate use of those funds.

As discussed above, USAID/Uganda proposes that all three alternative uses be justified in the PAAD for the primary education activity, and that USAID be given the authority to decide on any or all of these uses as the time comes for each tranche of the NPA to be disbursed. The Program Agreement would of course also state that all three uses are eligible uses. The means of making the determination in the case of each tranche would be spelled out, and would involve consultations with appropriate government agencies.

Project Component Funds

The project component funds will be phased as follows. Technical assistance will be evenly spaced over the five program years, US\$3.2 million in five tranches. The remaining US\$2 million will be used to equip the IMISS centers and probably be expended in years 2 and 3 of the program.

Programming the Local Currency

As local currency is generated, it will be deposited in a special, interest-bearing account in the name of the Government of Uganda. A number of the reforms to be carried out in the primary education sector require increased expenditures on the part of the Government, and the local currency generated will be jointly programmed for these uses. The Uganda shilling equivalent of \$65 million will be deposited into the special account over the course of the activity and, as noted earlier, will represent the Government's contribution to the activity.

STRATEGY FOR FINAL DESIGN WORK (PAAD)

Outstanding Institutional, Social, and Economic Issues

The institutional, social, and economic analyses each concluded that certain issues still need to be resolved. None of these issues puts the overall feasibility in question, but some of them point to major PAAD-level design considerations, and should therefore be done before PAAD work begins. All of them are germane to the program's effectiveness, and are best resolved sooner rather than later.

Questions to Answer Prior to PAAD Development.

- (1) How definitively can we say that reducing parents' costs of girls' education will affect girls' persistence rate? Carry out "action research" on girls' persistence and agree upon a strategy with the ministry for addressing girls' persistence rates.
- (2) What options is the ministry willing to consider (and for which does it have the means to implement) to raise girls' persistence rates in primary grades?
- (3) How many qualified candidates are available to staff the Education Service Centers and the central IMISS organization? Who are these people, and what needs to be done to get them on the job?
- (4) How will USAID and the World Bank coordinate their support, responsibilities, and roles in the IMISS program?
- (5) What assumptions did the World Bank use in its budgeting and scheduling? Which of these does USAID want to revise?
- (6) What is the final selection of ten districts to be served initially with Education Service Centers, and of demonstration schools and coordinating schools within those districts?
- (7) What conditionalities and pre-conditions is the ministry willing to accept, and on what schedule?
- (8) What is the most current status of the civil service reform, its effect on teachers' salaries, and, consequently, on NPA conditionalities?

Questions to Answer During PAAD Development.

- (9) What is a rough estimate of the number of training modules and cycles that can be delivered each year? How many trainees can participate in one module (or training session)?

(10) What equipment, materials, and supplies are needed to implement the training programs?

(11) What precisely needs to be done to strengthen the ministry's accounting system to the degree that program resources can flow with reasonable security through districts to schools?

(12) What alternative balance-of-payments-support uses of NPA are currently justified?

(13) What are the guiding questions and final design of the monitoring and evaluation component? Who will do it, and how much will it cost? How can it be placed in the context of ministry operations so that skills are transferred and capacity built?

(14) How much is the educational reform expected to cost the government? How can the program best help sustain the reform after the life of the project?

Questions to Answer and Activities to Undertake During the Initial Project Phase.

(15) Implement the recommended revisions to the Ministry's accounting systems.

(16) Carry out "action research" on what motivates teachers to stay in teaching, and what financial and/or professional incentives are needed to keep trained teachers.

Schedule and Costs of Project Development Work and Recommended Studies

Three phases of additional work are needed to fully prepare the program for implementation:

Pre-PAAD studies and further negotiations with the ministry and the World Bank. Discussions with the World Bank could begin in Washington after the PAIP has been approved. Negotiations with the ministry could begin immediately thereafter. USAID's final negotiations with the ministry will have to be coordinated with the ministry's negotiations with the World Bank.

Approximately \$30,000 will be budgeted for pre-PAAD analyses on girls' attrition and teacher motivation, to be carried out primarily by local consultants.

PAAD development. The PAIP is quite detailed, reducing the amount of design work that needs to go into the PAAD.

Approximately three person/months of U.S. technical assistance (3 x \$25,000) and six weeks of local consultants (\$6 x \$600) should be budgeted for the PAAD development.

Anticipated Dates of Pre-PAAD Activities

Review of PAIP in Washington, D.C.	January 15, 1992
Pre-PAAD activities completed	April 1, 1992
PAAD completed	May 15, 1992

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TELEGRAMS: "EDUCATION."
TELEPHONE: 234440.

IN ANY CORRESPONDENCE ON
THIS SUBJECT PLEASE QUOTE NO.

APPENDIX 1
LETTER OF REQUEST FROM GOVERNMENT OF UGANDA



MINISTRY OF EDUCATION AND SPORTS,
CRESTED TOWERS,
P.O. BOX 7063,
KAMPALA, UGANDA.

12th December, 1991

Mr. Keith Sharper,
Mission Director,
USAID,
KAMPALA.

Dear Mr. Sharper,

REQUEST FOR ASSISTANCE IN THE EDUCATION SECTOR

The National Resistance Movement Government in 1987 launched its Economic Recovery Program which provides a comprehensive framework for stabilizing the economy of Uganda and re-establishing it on a strong growth path. Coupled with this have been initiatives in civil service reform and streamlining and improvement of social service delivery schemes. In 1989 an Education Policy Review Commission was convened. Based on their findings and recommendations, a White Paper on Education was prepared. This draft document has been approved by Cabinet, and it will form the basis for a national conference on education reform in the early 1992. The Ministry of Education and Sports has also prepared a Five Year Education Sector Investment Programme, which was presented to the international donor community in July of this year.

Education is viewed as a fundamental human right in Uganda. As you well know, Uganda once had an educational system which, given its quality and coverage, was a model for all of Africa. The task of rebuilding the education system in Uganda is a large one, but one to which the Government is fully committed. The goal of our national education program is to forge national unity and harmony and evolve grass-roots democratic institutions and practices as well as to create a national wealth and self reliance and promote ethical values. Several broad aims direct our current efforts. These are: democratization, vocationalization, decentralization, and quality. In implementing these broad principles the Government aims to provide universal primary education by the year 2003 and to locate schools within four kilometres of each school age child. In addition the Government wants to ensure greater access to education for girls, adults, the handicapped and disadvantaged groups. Education is to be oriented to productive work, by making the curriculum more relevant and by introducing vocationally-oriented courses and community service schemes. Greater devolution of responsibility from the central ministry to the district and local levels is envisaged, both to mobilize local resources and increase efficiency. Quality is to be improved by enhancing facilities, making instructional materials more available, improving evaluation and examinations, and providing more effective teaching. Adequate remuneration of teachers is emphasized as one of the hinge pins to quality improvement. Within the education sector, resource reallocation is planned from the tertiary level to the primary education subsector.

Central to effecting the changes in the education system envisioned are efforts to improve the quality of and training for existing teachers, and to upgrade the surroundings they work in and resources that support their work.

The Ministry of Education and Sports has received an appraisal mission from the World Bank and agreed on a tentative program to ~~include facilities refurbishment in ten districts, support for~~ the central Ministry and technical support in curriculum reform and examinations. We have also had preliminary discussions with your Agency and would welcome grant funded assistance to address primary teacher training and management strengthening and capacity building at the district level, teacher incentive, provision of textbooks and teaching materials, limited material assistance to selected schools, and a program to enhance persistence of girls in primary schools. These program elements are in line with our Ministry plans and result from the collaboration we have enjoyed with USAID over the last months. We view these activities as critical to enhancing the quality of primary education in Uganda and would appreciate any support you can give to us.

At the appropriate time the details of the grant assistance may be discussed before the necessary documents are signed.

Sincerely,



Tom Ogwal
PERMANENT SECRETARY

APPENDIX II

PRELIMINARY POLICY MATRIX

ANNUAL TRANCHES:	1	2	3	4	5
COMPONENT #1: TEACHERS' SALARIES INCREASED					
Increase education share of total recurrent budget to:	___%	___%	___%	___%	___%
Increase primary education share of education budget to:	___%	___%	___%	___%	___%
Increase average teacher's salary by:	___%	___%	___%	___%	___%
Ensure sufficient teacher hiring to result in 1:40 teacher-student ratio:	Benchmark to be established	Same	Same	Same	Same
COMPONENT #2: DISTRIBUTE INSTRUCTIONAL MATERIAL EQUITABLY					
Textbooks distributed equitably, on a nationwide basis, in a 1:3 (book:student) ratio:	Distribution plan developed	first half of planned districts	second half of planned districts		

PRELIMINARY POLICY MATRIX (cont'd)

ANNUAL TRANCHES:	1	2	3	4	5
COMPONENT #3: DEVELOP INSERVICE TRAINING CENTERS					
Prepare, staff, and establish IMISS centers	Staff posi- tions estab- lished and filled	IMISS centers opera- ting as planned	IMISS centers opera- ting as planned	Phase II IMISS centers selec- ted	Demons- trated commit- ment to IMISS
COMPONENT #4: SCHOOL MANAGEMENT BASIS ESTABLISHED					
AID-acceptable guidelines developed and block grants distributed	Guide- lines deve- loped	Grants dis- bursed	Grants dis- bursed	Grants dis- bursed	Grants dis- bursed
COMPONENT #5: EQUITABLE PERSISTENCE PROVIDED FOR					
AID-acceptable guidelines developed and assistance disbursed	Guide- lines deve- loped	Assis- tance dis- bursed	Assis- tance dis- bursed	Assis- tance dis- bursed	Assis- tance dis- bursed

PRELIMINARY LOGICAL FRAMEWORK

NARRATIVE SUMMARY	MEASURABLE. INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
Goal: Improve the quality of and reduce inequities in the primary education system.	More students passing exams based on new relevant-basic-skills curricula.	Data from m&e longitudinal study; MOE annual persistence & pass rates.	Political stability; Sustainable economic growth; Program inputs affect quality.
<p>Purpose #1: Improve the quality of classroom instruction to enhance students' acquisition of basic skills.</p> <p>Purpose #2: Improve the efficiency of local level education administration, management, and accountability.</p> <p>Purpose #3: Reduce inequities access to and persistence in primary education.</p>	<p>Teachers' salaries paid in time to teachers actually teaching;</p> <p>Evidence of improved classroom teaching;</p> <p>Evidence of continuous assessment in classroom;</p> <p>Evidence of resources flowing to schools;</p> <p>Rise in girls' persistence rates.</p>	<p>MOE records;</p> <p>Data from regular program reports;</p> <p>Data from m&e longitudinal study;</p> <p>Classroom observation;</p> <p>School records;</p> <p>MOE records;</p> <p>Regular program reports.</p>	<p>Budgetary means to raise teachers' salaries;</p> <p>Trainable and motivated teachers and management personnel;</p> <p>Exams revised to reflect new curricula;</p> <p>Leaks in accounting systems can be plugged;</p> <p>Lowering cost to parents of girls' education raises persistence rates;</p> <p>Improved quality raises persistence rates.</p>

<p>Outputs:</p> <ol style="list-style-type: none"> 1. Trained tutors, able to provide effective in-service training to teachers 2. Trained teachers, able to help students learn basic skills relevant to their lives 3. Trained head teachers, able to manage and account for the financial, material, and human resources of the school 4. Trained district education officers and staff, able to manage the flow of resources to schools and to account for the use of those resources 5. Trained inspectors, able to provide ongoing professional support to teachers in the classroom 6. 3,000 trained school management committees, able to offer useful community support 	<p>Approximate magnitude of outputs:</p> <ol style="list-style-type: none"> 1. 100 competent and effective tutors; 45-50,000 competent and effective teachers; 3,000 competent and effective head teachers and school committees; 100 competent and effective support staff; 100 competent and effective inspectors; 	<p>MOE records;</p> <p>Longitudinal study;</p> <p>Regular program reports;</p> <p>School and classroom observation.</p>	<p>Tutors and trainees available to ESCs for training;</p> <p>Technical assistance in place and effective;</p> <p>Adequate transport and equipment to get trainers and materials to schools.</p>
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Inputs:	Quantity of inputs:	USAID records.	
<p>1. NPA</p> <p>2. Long-term technical assistance</p> <p>3. Equipment, materials, and supplies</p> <p>4. Short-term technical assistance and training</p>	<p>\$90m NPA</p> <p>\$14.5m long-term tech assistance</p> <p>\$2m equipment, materials, and supplies</p> <p>\$1.5 short-term tech assistance and training</p>		<p>Conditionality met at each tranche;</p> <p>Uninterrupted flow of AID funds.</p>

OBJECTIVE TREE

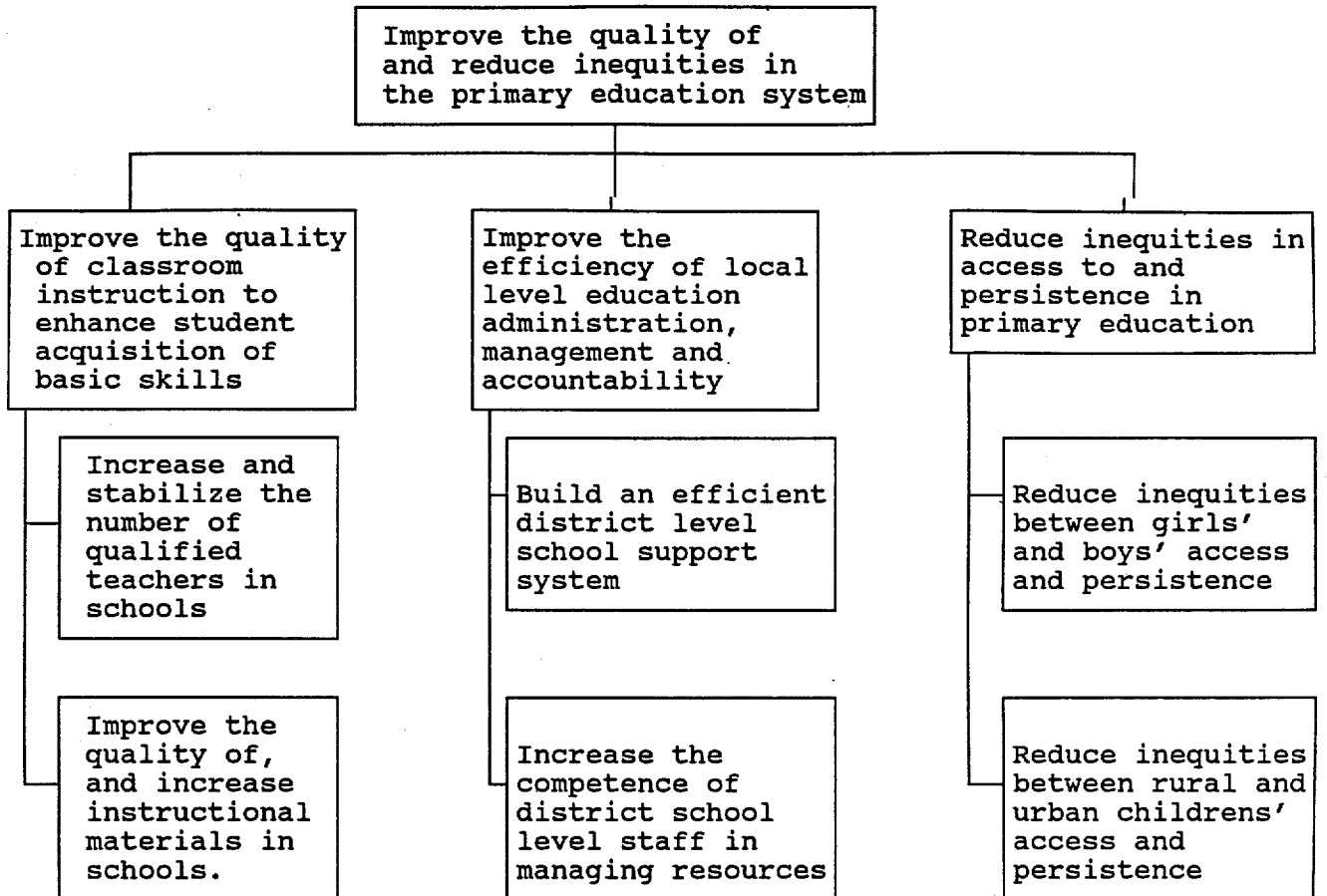


TABLE 1

LIFE QUALITY INDICATORS

Education Sector Tables

INDICATOR	UGANDA			SUB-SAHARAN AFRICA		
	1960	1975	1987	1960	1975	1987
Life Expectancy	43	48	52	40	46	51
Under-five Mortality (per 1000)	1960 224		1988 169	1960 284		1988 183
% of Required Daily Calories	1964/66 96		1984/86 95	1964/66 92		1984/86 91
Adult Literacy Rate	1970 41		1985 58	1970 26		1985 34
Male	52		70	34		48
Female	30		45	26		34
Access to Health Services (% of Pop. with)			1987 57			1987 45
Population per Doctor	1960/65 11107	1970/75 9200	1989 21903	1960/65 32200	1970/75 --	1984 23850
Access to Safe Water (% of Pop. with)	1960/70 17.5	1970/80 15.5	1988 13	NA		

Source: de Coninck, J. "Uganda Country Study: Evaluating the Impact of NGOs in Poverty Alleviation" Overseas Development Institute, April 1991

PU	Planning Unit
PVO	Primate Voluntary Organization
RC	Resistance Council
SHEP	School Health Education Project
SMC	School Management Committee
STEPU	Science and Technology Equipment Production Unit
TSC	Teacher Service Commission
TTC	Teacher Training College
UNDP	United Nations Development Program
UNEB	Uganda National Examination Board
UNESCO	United Nations Education, Social and Culture Organization
UNICEF	United Nations Children Fund
UPE	Universal Primary Education
USAID	United States Agency for International Development-- Uganda Mission
USDH	United States Direct Hire
UShs	Uganda Shillings
WFP	World Food Program
UShs	Uganda Shillings

TABLE 2

PRIMARY SCHOOL STATISTICS, 1980-1990

YEAR	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
PUPILS (000)	1297	1407	1582	1730	1931	2117	2204	2308	2417	2533	2367
TEACHERS	38425	40489	43967	49206	57078	61242	66101	72970	75561	83143	84149
SCHOOLS	4276	4585	4945	5605	6425	7025	7350	7627	7905	8336	8080
% UNTRAINED	35	38	42	44	46	44	44	42	41	48	
GER*	49.6	52.2	56.7	59.9	64.6	68.4	68.6	72.9	77	69.6	

TABLE 3

SECONDARY SCHOOL STATISTICS, 1980-1989

YEAR	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	
PUPILS (000)	73.1	83	101.7	117.1	144.5	159.7	196	24.2	238.1	239.4	
TEACHERS	3202	3732	4772	5617	6561	6903	10193	13188	12532	11500	
SCHOOLS	120	178	261	285	417	500	508	515	520	522	
% UNTRAINED	17	25	33	39	49	44	40	38	36	34	
GER*	4.2	4.6	5.8	6.1	7.3	7.8	9.2	10.3	10.6	11.5	

Sources: 1990 MOE print-outs; Evans and Odaet, 1991; EPRC, 1989.

Note: From 1986 on government and private schools are reported together.

*Gross Enrollment Ratio

TABLE 4

GENDER DISPARITIES IN PRIMARY EDUCATION (1990)

GRADE	P1	P2	P3	P4	P5	P6	P7
% Female							
Government Schools	46	45	45	44	44	43	38
Private Schools	46	45	45	44	44	46	42
% Female Drop-out		32	12	22	22	22	33
% Male Drop-out		6	10	19	19	19	19

Source: MOE Print-outs

TABLE 5

REGIONAL EDUCATIONAL DISPARITIES (1989)

	High	Low	Average
PRIMARY			
GER	1.43	0.22	0.7
% Untrained Teachers	72	5	48
% Female Students	na	na	na
SECONDARY			
GER	0.3	0.02	0.1
% Untrained Teachers	67	14	36
% Female Students	62	19	34

Sources: MOE Print-outs; Evans and Odaet, 1991.

TABLE 6

EDUCATIONAL FINANCE INDICATORS

INDICATOR	86/87	87/88	88/89	89/90	90/91	91/92	Source
GDP Growth Rate		6.8	6.8	4.8	4.2	5.0	SAC (1)
Central Gov't/GNP			10.9	12.0	14.3		SAR (2)
Social Services/GNP			2.3	2.3	2.6	6.0	SAR
Ed/GNP			1.3	1.1	1.4	3.6	SAR
Defence/GNP			2.7	3.4	7	2.7	SAR
Defence:Ed			2.1	3.1	5.0	0.8	SAR
Ed/GOU Budget		11.9	12.5	12.5			SA(3)
Ed/GOU Recurrent Budget				11.4	16.9	14.6	SAC
Recurrent & Capital Ed/GOU Budget				15.6	15.5	20.0	GOU (4)
Primary							
P.Ed/Recurrent Budget	19 18.4	20 20	31 34.8	27			PC SA
P.Ed/Capital Budget		6.9	0.4	3.9			PC
P.Ed/R&C Budget		17.4	26.9	29.6			"
Salaries/Recurrent PEd	95.7	68.8	69.2	69.1	70.5	73.8	SA,MOE(6)
Secondary							
S.Ed/Recurrent Budget	12	44	31	22			PC
S.Ed/Capital Budget		12.0	9.9	5.0			"
S.Ed/R&C Budget		37.5	28.2	17.8			"
Higher							
H.Ed/Recurrent Budget	29	13	19	24			PC
H.Ed/Capital Budget		24.9	57.9	40.7			"
H.Ed/R&C Budget		15.3	19.9	22.7			"

Sources: (1) Structural Adjustment Credit, (2) Staff Appraisal Report,
 (3) USAID Sector Assessment, (4) GOU Financial Statement and Draft Estimates,
 (5) Public Choices for Private Initiatives, and (6) MOE Financial Office

TABLE : KEY MACROECONOMIC INDICATORS, 1987/88-1993/94

Item	1987/88	1988/89	1989/90	Est. 1990/91	Proj. 1991/92	Proj. 1992/93	Proj. 1993/94
GDP Growth Rate	6.8	6.8	4.8	4.2	5.0	5.0	5.0
Private Consumption per Capita Growth Rate	6.4	5.2	1.8	1.6	0.5	3.2	1.4
Debt Service/Exports of Goods and Services ¹	51.0	58.4	66.2	66.6	64.5	53.5	48.3
Gross Investment/GDP ²	11.3	10.5	11.0	11.7	12.1	13.2	13.7
National Savings/GDP ²	6.1	4.3	5.1	7.0	7.5	9.2	10.2
Government Revenues/GDP	6.7	6.5	7.5	8.1	9.4	10.7	12.5
Government Expenditures/GDP ³	13.0	12.0	13.9	16.6	22.7	21.2	22.0
Overall Deficit/GDP ⁴	-6.3	-5.5	-6.4	-8.5	-13.4	-10.5	-9.5
CPI (1984/85 = 100)	100.0	186.2	239.6	332.4	382.2	420.5	449.9
Real Effective Exchange Rate (1984/85 = 100)	131.4	114.0	98.9	62.4	54.3	54.3	54.3
Exports Growth Rate (nominal)	-22.4	-3.3	-27.1	-15.7	12.4	23.1	19.2
Imports Growth Rate (nominal)	6.0	18.9	-9.9	-5.8	7.3	11.0	9.0
Current A/C Balance (US\$ Mill) ⁴	-295.1	-389.8	-429.0	-444.0	-471.0	-470.0	-483.0
Current A/C Balance/GDP ²	-5.2	-6.1	-5.9	-4.7	-4.5	-3.9	-3.5

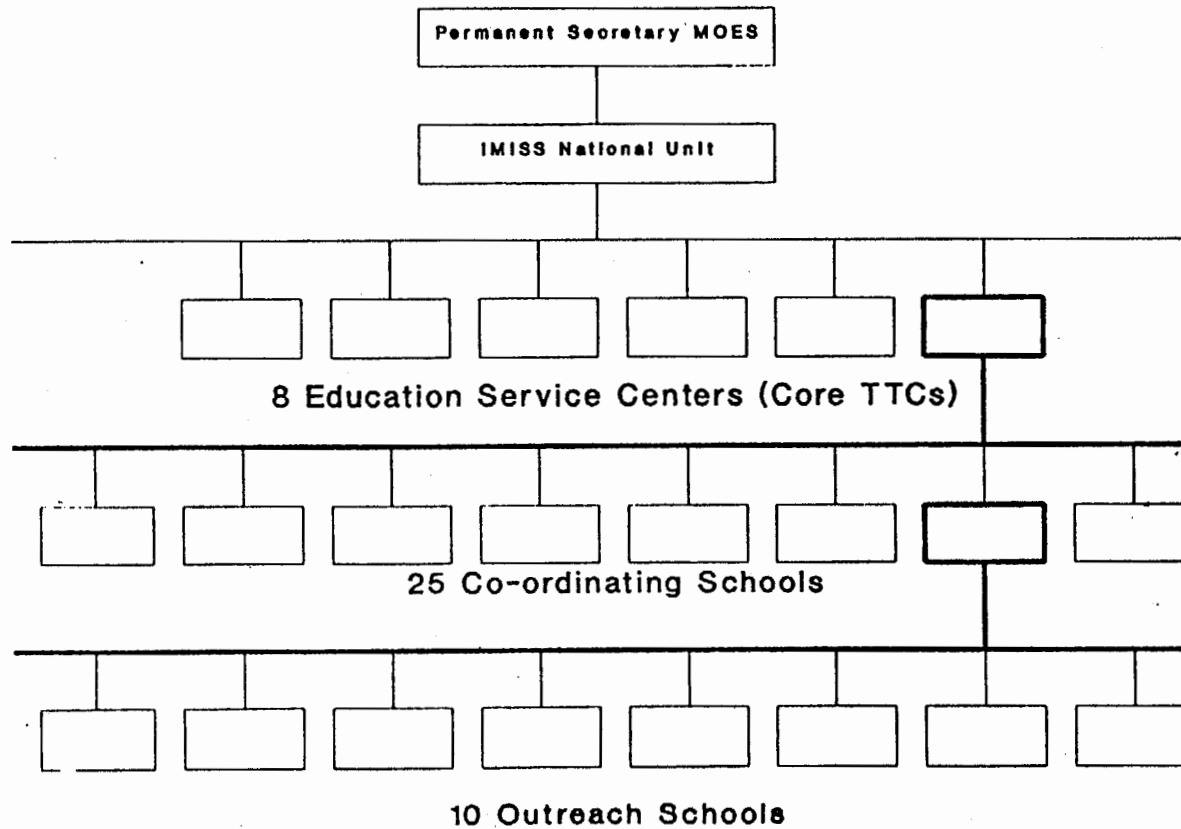
¹ Debt Service: on a commitment basis; exports of goods and services include private transfers.

² Expressed in constant prices to isolate the impact of rapid exchange rate adjustment.

³ Government expenditure levels in 1990/91 and 1991/92 are not comparable to previous years owing to a fuller coverage of development expenditures. This is part of an exercise to improve overall budgetary procedures.

⁴ Excluding grants.

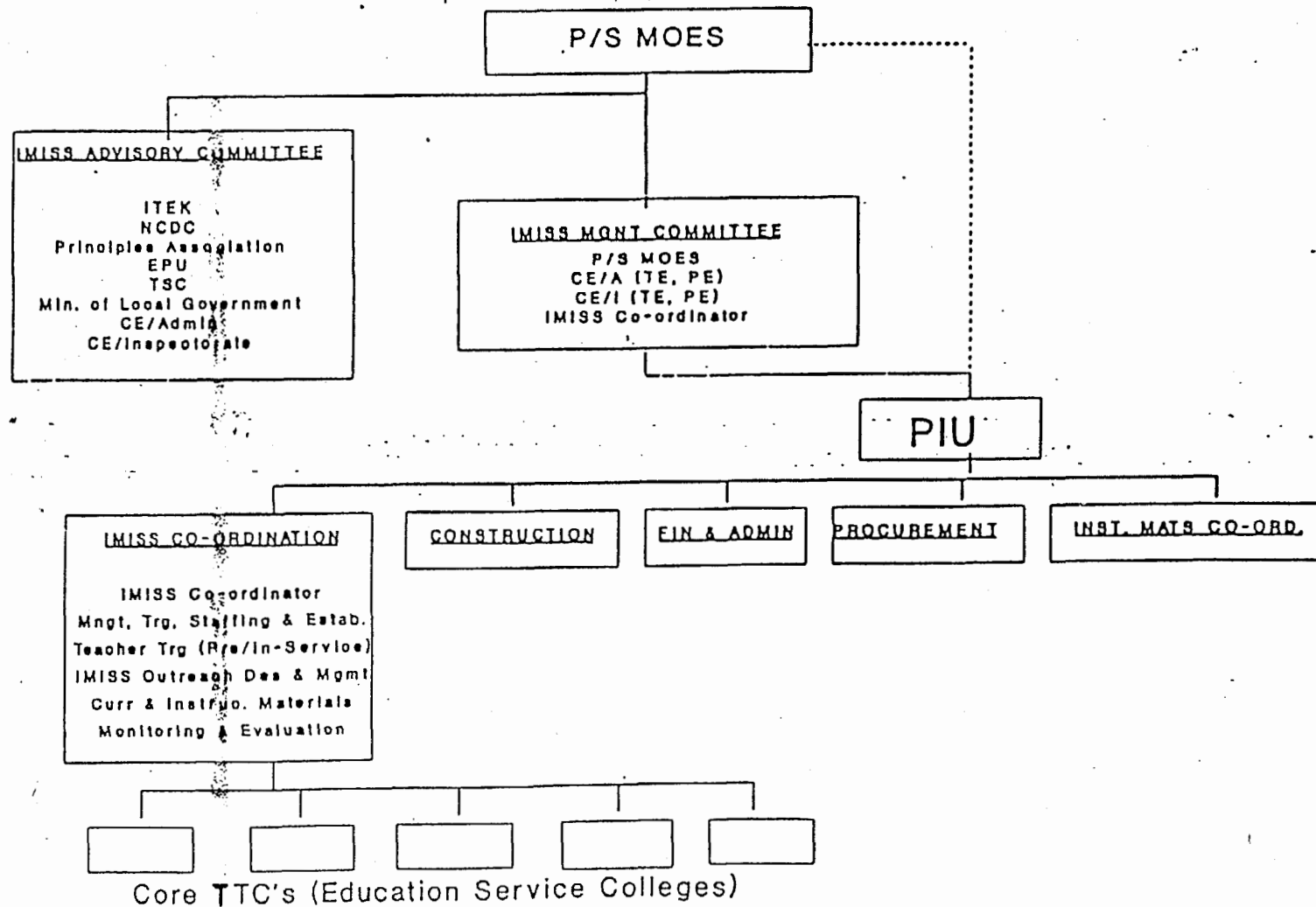
National IMISS* Network



•Integrated Management & Instructional Support System

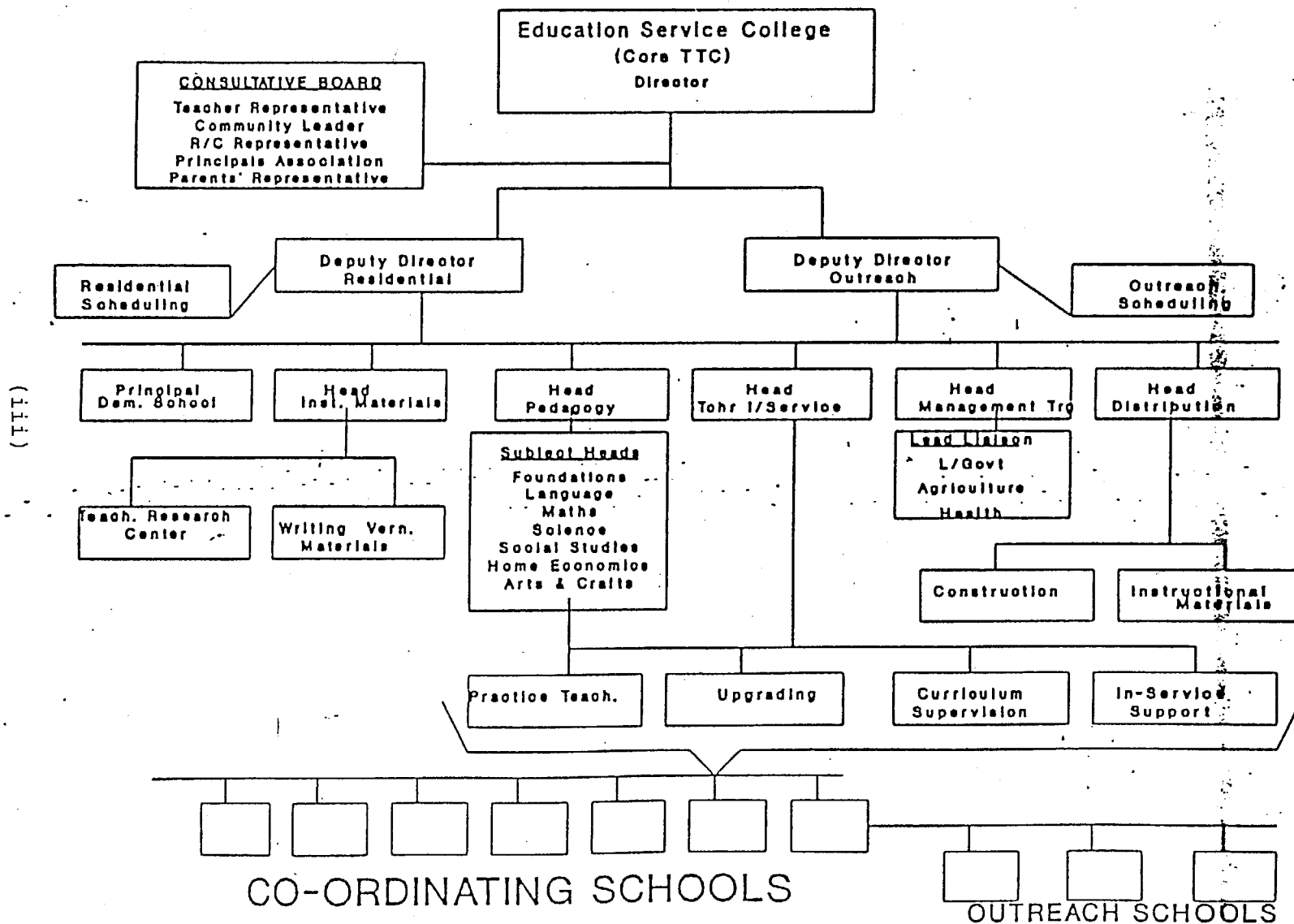
National Level IMISS Structure

(ii)

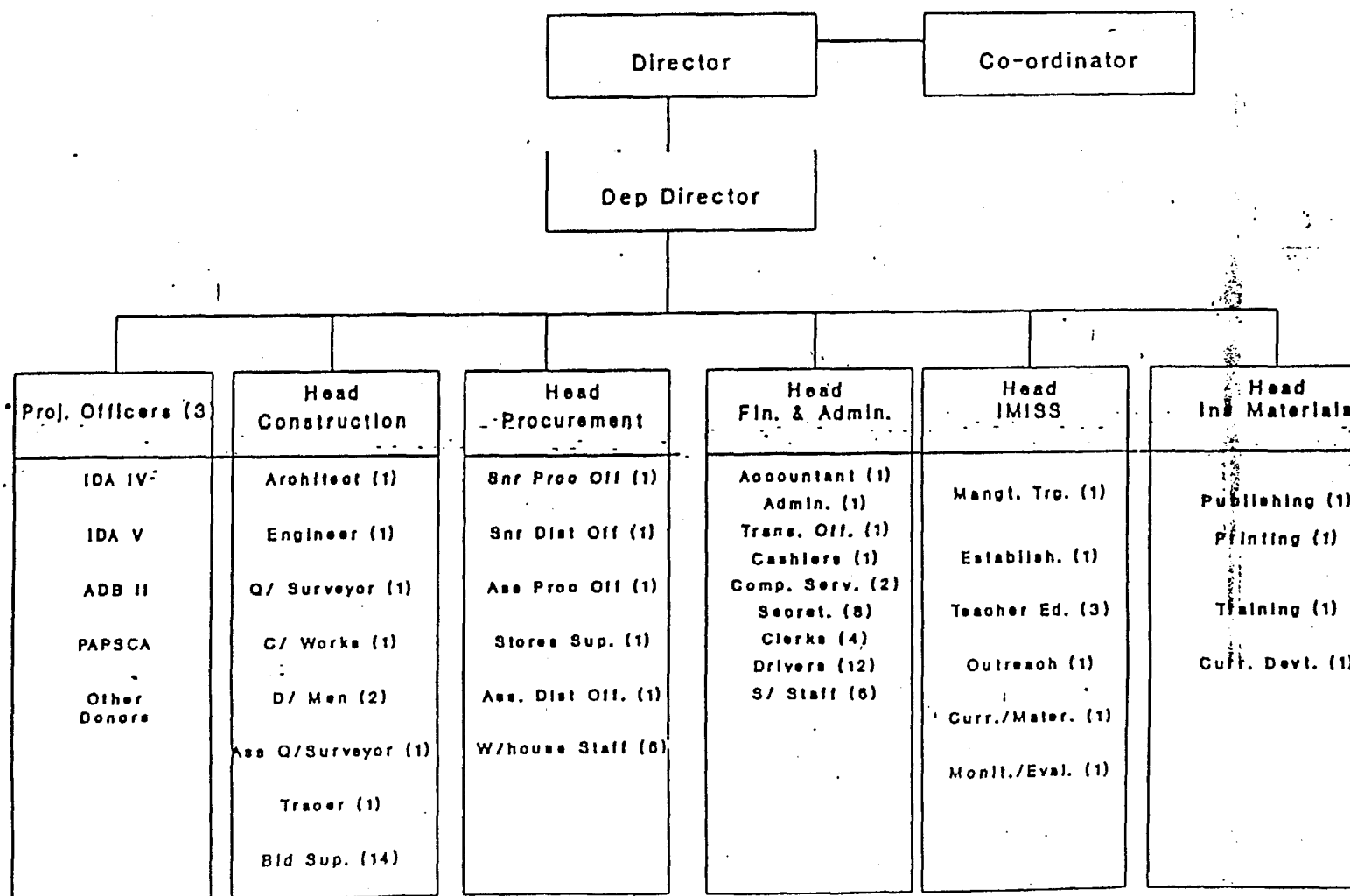


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District Level IMISS Structure



Project Implementation Unit Structure



AIDE MEMOIRE¹

UGANDA

PROPOSED EDUCATION SECTOR DEVELOPMENT PROJECT

November 21, 1991

INTRODUCTION

1. An appraisal mission comprised of Messrs. N. Colletta, Mission Leader (IBRD), P. Walker, Architect (IBRD), D. Holsinger, General Educator (IBRD), V. Levine, Economist (Consultant), D. R. Evans, Teacher Training Specialist (Consultant), and N. Bilany, Curriculum and Textbook Specialist (Consultant) visited Uganda from November 7-21, 1991 to appraise a proposed Primary Education Development Project. The proposed project was extensively pre-appraised by the same team plus V. Greaney, Examination Specialist (IBRD) and M. Ainsworth, Human Resource Economist, in July-August, 1991. The purpose of this mission was to review with the Government the proposed project as developed in the Draft White Cover Staff Appraisal Report (SAR) dated October 19, 1991 and make appropriate refinements. The findings, recommendations, and agreements reached are as follows.

PROJECT OBJECTIVES, SCOPE AND TITLE

2. The project objectives to: (a) Increase Access to Learning Opportunities; (b) Improve School Management and Instructional Quality; and (c) Strengthen Planning, Management, and Implementation Capacity remain the same. The scope of the project has been reduced to focus on the primary level and related teacher training in accord with the Government's priority to achieve Universal Primary Education as soon as possible. The originally proposed secondary education development component will be further prepared as a part of the pre-investment studies financed under this project. The Ministry of Education requested that the title of the project be changed from Primary Education Development to Uganda Education Sector Development Project as the scope and content of the project went beyond developing primary education and included the development of several aspects of the education sector including, teacher training, curriculum and examination reform, local textbook capacity building and strengthening planning and management of the entire MOE.

¹The findings, recommendations and agreements of this mission are subject to senior management review upon the mission's return to Washington. The Government will be informed of any changes or modifications.

PROJECT COMPONENTS

A. Increasing Access to Learning Opportunities

3. **Rehabilitation and Construction of Facilities.** The project will focus on physical rehabilitation and construction of classrooms, eight teacher training colleges and one tutor training college in select Districts representing the four major geographic regions of the country and selected on the basis of female under-enrollment, numbers of untrained teachers, and overall enrollment (existing and potential). Within the select Districts, Teacher Training Colleges were identified for rehabilitation on the basis of accessibility and centrality of location with regard to the surrounding primary schools and student population. See attached Annex A for District and TTC criteria and the selection process used.

4. **Provision of Learning Resources.** While the provision of facilities would be targeted on areas where access, particularly for females and primary school age children, could be maximized, it was agreed to provide primary textbooks and teachers guides for the four core subjects (english, math, science, and social studies) for four grades for the entire country. Empirical studies demonstrate that textbook provision is the single most critical input into improving education quality. In the interest of equity, and given the limited resources of the nation, it was agreed that textbooks should be distributed on a 1:3 (one set of books to three students) basis rather than the current 1:6 ratio. It was further agreed that each school would be provided with a small library of 60 (ten copies each of six different titles) supplementary readers to be contained in a box cabinet for ready mobility within the school and for exchange with other neighbouring schools. Details regarding the numbers and costs of textbooks, guides, and supplementary readers to be financed under the project are in the attached project cost tables.

5. **Building Local Capacity to Develop Learning Resources.** The project would continue to provide support through training and technical assistance to local publishers and printers in order to enhance their capacity. In addition a Book Policy Review would be undertaken to identify those policies, e.g. credit, pricing, taxes, duties, etc., which could be reformed to enable the local publishing and printing industry to be more competitive. With regard to local capacity to develop instructional materials, it was agreed that the STEPU (Science and Technology Education Production Unit) proposal is more suitable for financing in a future project focusing on secondary education development (see Annex B). By negotiations, the final terms of reference for the above Book Policy Study would be submitted to IDA for review and comment (see Annex C).

B. Improving School Management and Instructional Quality

6. **Primary School Management and Instructional Improvement.** The organization, structure and functions of the proposed Integrated Management and Instructional Improvement (IMISS) program was further developed and refined (see Annex D). Eight existing Teacher Training Colleges were identified (para. 3 above) to become Education Service Colleges (ESCs) which will implement the new IMISS approach. The IMISS model is a three-pronged program of residential pre-service (similar to the existing TTCs); in-service upgrading through combined residential (vacation time) and non-residential (correspondence) training; and continuous in-service training using the network of

coordinating schools and their associated outreach schools. The ECS would also be the district center for distribution of textbooks and instructional materials, and for support of local construction of classrooms under IDA V. One of the new ESCs would contain an added wing for tutor training programs to prepare staff. Further development of the organization, staffing, and the network of coordinating and out-reach primary schools, and various programs will begin under the agreed Project Preparation Facility (PPF). It was agreed that the government would prepare detailed training programs for the first year's implementation of the in-service and upgrading primary school teachers, headmasters, and local management, DEOs, PTA Chairpersons, etc., by December 31, 1992.

7. **Curriculum Development.** The curriculum development sub-component was further refined by defining the subjects to be covered and revising the costs involved in training and writing workshops. It was agreed that the government would submit to IDA a revised primary school curriculum for review and comment by September 30, 1992 as a condition for implementing the curriculum reform component (syllabus writing). The revised curriculum would be presented at a planned national seminar.

8. **Examination Reform and National Assessment.** This component remained largely intact, concentrating on: (a) the improvement of examination development linking more closely with curriculum development and feedback to instructional improvement; (b) the introduction of continuous assessment; (c) the development of practical skills texts and measures and; (d) the undertaking of a National Assessment of Educational Performance (NAEP). It was agreed that the following would be submitted to IDA for review and comment: (i) a detailed plan for examination reform by July 1, 1992; (ii) a program to train examination staff by September 30, 1992; (iii) terms of reference for the NAEP by December 31, 1992; and the preparation of teacher training modules on continuous assessment and the testing of practical skills by December 31, 1993. The proposed new UNEB building with efficient and secure printing was reduced in cost, with the recommendation that it be located in Kyambogo.

C. Strengthening Planning, Management, and Implementation.

9. **Senior and Middle Management Training.** The proposed management training program and related activities to improve the MOE's administrative systems (records, accounting, and information) remains as spelled out in the PPF.

10. **Strengthening the Education Planning Unit (EPU).** It was agreed to expand the portfolio of the EPU to include project preparation, monitoring and evaluation functions. EPU administration would be strengthened by the creation of the new posts of Deputy Director and Office Administrator. The new structure, functions and staffing are spelled out in Annex E. It was agreed that the government would provide assurances that the appropriate type and number of posts in the EPU would be approved and filled by September 30, 1992. In addition, a detailed workplan for the first year of the EPU's operations would be brought to negotiations for IDA review and comment.

11. **Expanding Project Implementation Capacity.** It was agreed that the project implementation unit (PIU) would be reorganized and expanded to service not only IDA projects but also other MOE foreign assisted projects. In addition to the three existing functional units of Administration and Finance, Construction, and Procurement, two new units dealing with Instructional Materials Coordination and Integrated Management and Teacher Training Support would be established. See Annex D for the reorganization and staffing of the PIU. The Construction Unit in particular would be expanded with District level supervisors to facilitate the planned program of primary school and Education Service College development. The Government has agreed to recruit and staff all new positions by project effectiveness.

12. **Pre-Investment Studies.** The earlier proposed school mapping and cost and finance studies have been reduced to program activities of the new education planning unit. The selection of IMISS network coordinating (lead) schools and outreach (satellite) schools for the 8 pilot IMISS network districts will be undertaken as a part of the PPF and early project implementation. The only remaining study is the Secondary Education Pre-investment Study. This consists of four sub-parts concentrating on general secondary, cost and finance, science and occupational education. Cross cutting issues of finance, management, etc. will also be covered (see Annex G for a detailed description of this activity).

ESTIMATED PROJECT COSTS

13. The estimated total project costs including contingencies is US \$ 60.5 million. The detailed cost tables are in Annex H. Recurrent cost implications are detailed in Annex I. The summary costab by major component and sub-component is as follows:

Component I. Increasing Access to Learning Opportunities.

Rehabilitation and Construction
Provision of Learning Resources
Building Publishing/Printing Capacity

Sub-total US\$42.75

Component II. Improving School Quality

Curriculum Development
Examination and Assessment Reform
Integrated School Management and
Instructional Support

Sub-total US\$7.81

Component III. Strengthening Planning, Management and Implementation

Upgrading Middle and Senior Management
Strengthening Planning
Expanding the PIU
Pre-investment Studies

Sub-total US\$7.72

Total Estimate Project Cost US\$58.28

Including contingencies US\$64.62

=====

PROJECT IMPLEMENTATION SCHEDULE

14. The project will be implemented over a six year period (1992-98). See the detailed implementation schedule in Annex J. Project monitoring and evaluation indicators are presented in Annex K.

TENTATIVE PROJECT PROCESSING SCHEDULE

Post Appraisal	January-February, 1992
Negotiations	March-April, 1992
Board	May-June, 1992
Effectiveness	July-August, 1992

END NOTE

15. The mission wishes to thank the Government for the excellent cooperation and assistance provided during our visit.

ANNEXES

- A. District, PTTCs, and Tutor College Criteria and Selection.
- B. Review of STEPU
- C. Draft TOR for Book Sector Policy Review
- D. Organization, Staffing and Function for IMISS Network
- E. Organization, Staffing and Function for EPU.
- F. Organization, Staffing, and Function for P.I.U.
- G. Draft TOR for Secondary Education Pre-investment study
- H. Working Project Costs Tables
- I. Recurrent Cost Projections Model
- J. Working Project Implementation Schedule
- K. Project Monitoring and Evaluation Indicators.

SELECTION OF DISTRICTS AND TEACHER TRAINING COLLEGES FOR IMISS

Selecting districts and teacher training colleges for the Integrated Management and Instructional System Support (IMISS) requires a dialogue between technical and professional criteria on one hand, and political, ethnic and religious criteria on the other. This annex presents two sets of criteria from the technical perspective: one for selecting districts, and another for selecting Teacher Training Colleges (TTCs) to be upgraded into Education Service Colleges (ESCs). At each stage of the selection process extended discussions with representatives of GOU have occurred which combined these technical criteria with equally important criteria of balance and equity. The resulting selection of districts and TTCs represents a compromise between these two perspectives.

The activity under IDA 4 and IDA 5 represents the first phase of an ongoing process of rationalization of the provision of teacher education and continuous support for the teachers and headmasters of the primary schools of Uganda. Implementation of IMISS will take place in a transitional way, with the old TTCs gradually being converted to other uses as the ESCs begin to function. The final outcome should be a national network of perhaps 20 ESCs which are the hubs of a local support networks for primary schools. During the transition phase both ESCs and some of the traditional pre-service TTCs will coexist, with the latter serving in some ways as outreach centers for the ESCs.

I. CRITERIA FOR SELECTION OF DISTRICTS WITHIN REGIONS

In this section four variables relating to primary education are used to rank districts within regions in order of priority for implementation of the IMISS approach. Table 1 presents an alphabetized list of the districts and both the raw data and normalized scores for the four variables. In Table 2 these data are combined into an index using a set of weights and then ranked by their index score within regions.

For this exercise 33 districts are used although there are currently 38 districts in Uganda. Five additional districts have been added since 1989 by elevating selected sub-districts to district status. The school census data for 1989 and 1990 uses the 33 old districts which are the basis for this analysis. In any case, ESCs will have to serve larger catchment areas since they are too expensive to build one in every district.

The four variables used to rank the districts are explained below:

1. Total Enrollment - Total enrollment measures the potential impact of the full range of IMISS interventions through in-service, textbook, school construction and management support services. Bigger districts have more potential clientele. Conversely, bigger districts will require more coordinating schools and greater capital and recurrent costs to implement IMISS. They will also be more complex and challenging to manage. This variable favors the more populated, Southern districts.
2. Percentage of Female Students - This variable is based on the percentage of enrollment which is female. Districts with lower female enrollment have greater need to improve access and hence are rated higher in the scores. Districts with above average female enrollment proportions are rated lower. This variable tends to favor districts which are less developed, including many of the Northern ones.

3. Untrained Teachers - This variable measures the potential demand for in-service upgrading and in-service support of teachers in the district. Districts with high numbers of untrained teachers are more needy and presumably will benefit more from IMISS services. Note, however, that this variable is strongly correlated with total enrollment, since large districts have many more untrained teachers than small districts, even if the percentage of untrained teachers is substantially higher in smaller districts.

4. Gross Enrollment Ratio (GER) - GER is a measure of the proportion of the age-group which is in school. Districts with low GERs have larger percentages of school-age children out of school. Implementing IMISS in districts with low GER scores will help to support increased access to schooling. This variable favors the less-developed fringe districts in the North. these are also districts with much smaller populations. The normalized scores shown in each column convert the raw variables into values with a mean of zero and a standard deviation of one.

TABLE 1 - KEY VARIABLES WITH NORMALIZED SCORES
(From 1990 School Census Data)

Reg District	Total Enrollment Students	Score	Female Students Females % Fem	Score	Untrnd Tchrs Unt Tchrs	Score	Gross Enrl Ratio GER('89)*	Score
N APAC	83,062	0.32	32,424	39% 0.90	1512	0.37	0.77	-0.35
N ARUA	124,458	1.50	43,420	35% 1.67	1095	-0.22	0.70	-0.03
W BUNDIBUGYO	13,826	-1.64	5,674	41% 0.53	395	-1.21	0.37	1.55
W BUSHENYI	110,965	1.11	51,531	46% -0.47	1198	-0.08	0.85	-0.76
N GULU	67,219	-0.13	25,451	38% 1.12	660	-0.84	0.52	0.82
W HOIMA	81,196	0.27	38,300	47% -0.61	2094	1.19	0.95	-1.24
E IGANGA	79,774	0.23	37,500	47% -0.58	2082	1.17	0.44	1.20
E JINJA	44,685	-0.77	22,111	49% -1.03	463	-1.12	0.73	-0.18
W KABALE	83,362	0.33	35,902	43% 0.15	1347	0.13	0.70	-0.03
W KABAROLE	97,330	0.73	44,486	46% -0.34	1993	1.05	0.61	0.40
C KAMPALA	64,727	-0.20	33,930	52% -1.58	124	-1.59	0.57	0.57
E KAMULI	49,853	-0.62	22,643	45% -0.28	1429	0.25	0.58	0.56
E KAPCHORWA	20,696	-1.45	9,135	44% -0.05	295	-1.35	1.10	-1.96
W KASESE	42,422	-0.83	18,612	44% 0.00	1050	-0.29	0.30	1.89
N KITGUM	74,657	0.08	25,403	34% 1.83	1114	-0.20	0.90	-0.99
N KOTIDO	17,413	-1.54	5,978	34% 1.77	291	-1.36	0.38	1.49
E KUMI	57,846	-0.39	23,288	40% 0.67	480	-1.09	0.89	-0.93
N LIRA	87,840	0.46	32,543	37% 1.27	724	-0.75	0.91	-1.06
C LUMEERO	67,063	-0.13	33,029	49% -0.99	1964	1.00	0.62	0.37
C MASAKA	67,637	-0.12	34,950	52% -1.44	1640	0.55	0.44	1.21
W MASINDI	42,247	-0.84	19,030	45% -0.21	922	-0.47	0.60	0.47
E MBALE	149,159	2.20	70,494	47% -0.62	2359	1.56	0.77	-0.35
W MBARARA	87,829	0.46	40,547	46% -0.42	1748	0.70	0.61	0.38
N MOROTO	8,941	-1.78	3,577	40% 0.72	129	-1.59	0.22	2.28
N MOYO	27,744	-1.25	10,473	38% 1.14	388	-1.22	0.78	-0.44
C MPIGI	120,050	1.37	62,944	52% -1.58	1996	1.05	0.86	-0.83
C MUBENDE	80,789	0.26	39,820	49% -1.00	2048	1.12	0.60	0.43
C MUKONO	112,243	1.15	55,718	50% -1.06	2156	1.28	0.66	0.17
N NEBBI	51,399	-0.58	19,182	37% 1.22	1460	0.29	0.90	-1.02
C RAKAI	47,016	-0.70	23,722	50% -1.21	1234	-0.03	0.84	-0.73
W RUKUNGIRI	57,157	-0.41	27,175	48% -0.68	615	-0.90	0.87	-0.83
E SOROTI	107,247	1.01	40,986	38% 1.05	1768	0.73	0.89	-0.97
E TORORO	139,060	1.91	60,215	43% 0.11	2571	1.86	0.93	-1.12
33 TOTAL	2,366,914		1,050,193	44%	41,344		0.70	
Average	71,725	0	31,824	43.9% (0)	1,253	0	0.69	0
Std Deviation	35,260	1	16,417	5.4% 1	708	1	0.21	1

Note: All data is based on the 1990 school census except the GER which uses the 1989 enrollment and population estimates published by the MOE Planning Unit in 1990. Because of an obvious error in the GER in Hoima, an estimated GER of .95 is used. In general the GER data is less reliable and should be treated with caution, although it probably represents the relative positions of the districts fairly well.

The scores in Table 1 can then be combined with various weights to create a single index made up of the four variables. Examples of various possible sets of weights and the resulting index values are shown in Table 2. Three different options are shown with the weights used for each displayed at the top of the column. For each index, the districts are sorted by the four regions to facilitate a stratified selection process which helps to address equity issues across regions.

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TABLE 2 - THREE ALTERNATE INDICES SORTED BY REGION

INDEX A - WEIGHTS			INDEX B - WEIGHTS			INDEX C - WEIGHTS		
Enrollment	0.25		Enrollment	0.35		Enrollment	0.15	
% Fem Stds	0.25		% Fem Stds	0.15		% Fem Stds	0.35	
Untr Tchrs	0.25		Untr Tchrs	0.35		Untr Tchrs	0.15	
GER	0.25		GER	0.15		GER	0.35	
Reg	Districts	INDEX A	Reg	Districts	INDEX B	Reg	Districts	INDEX C
C	MUKONO	0.38	C	MUKONO	0.71	C	MUKONO	0.05
C	MUBENDE	0.20	C	MPIGI	0.49	C	MUBENDE	0.01
C	LUWEERO	0.06	C	MUBENDE	0.40	C	MASAKA	-0.02
C	MASAKA	0.05	C	LUWEERO	0.21	C	LUWEERO	-0.09
C	MPIGI	0.00	C	MASAKA	0.12	C	MPIGI	-0.48
C	RAKAI	-0.67	C	RAKAI	-0.55	C	KAMPALA	-0.62
C	KAMPALA	-0.70	C	KAMPALA	-0.78	C	RAKAI	-0.79
E	MBALE	0.70	E	MBALE	1.17	E	IGANGA	0.43
E	TORORO	0.69	E	TORORO	1.17	E	SOROTI	0.29
E	IGANGA	0.51	E	SOROTI	0.62	E	MBALE	0.22
E	SOROTI	0.45	E	IGANGA	0.58	E	TORORO	0.21
E	KAMULI	-0.02	E	KAMULI	-0.09	E	KAMULI	0.04
E	KUMI	-0.44	E	KUMI	-0.56	E	KUMI	-0.31
E	JINJA	-0.77	E	JINJA	-0.84	E	JINJA	-0.71
E	KAPCHORWA	-1.20	E	KAPCHORWA	-1.28	E	KAPCHORWA	-1.12
N	ARUA	0.73	N	ARUA	0.69	N	ARUA	0.76
N	APAC	0.31	N	APAC	0.32	N	KOTIDO	0.71
N	GULU	0.24	N	KITGUM	0.09	N	MOROTO	0.55
N	KITGUM	0.18	N	GULU	-0.05	N	GULU	0.53
N	KOTIDO	0.09	N	NEBBI	-0.07	N	APAC	0.29
N	LIRA	-0.02	N	LIRA	-0.07	N	KITGUM	0.28
N	NEBBI	-0.02	N	KOTIDO	-0.52	N	LIRA	0.03
N	MOROTO	-0.09	N	MOROTO	-0.73	N	NEBBI	0.03
N	HOYO	-0.44	N	HOYO	-0.76	N	HOYO	-0.13
W	KABAROLE	0.46	W	KABAROLE	0.63	W	KASESE	0.49
W	MBARARA	0.28	W	MBARARA	0.40	W	BUNDIBUGYO	0.30
W	KASESE	0.19	W	HOIMA	0.23	W	KABAROLE	0.29
W	KABALE	0.15	W	KABALE	0.18	W	MBARARA	0.16
W	BUSHENYI	-0.05	W	BUSHENYI	0.18	W	KABALE	0.11
W	HOIMA	-0.10	W	KASESE	-0.11	W	MASINDI	-0.11
W	BUNDIBUGYO	-0.19	W	MASINDI	-0.42	W	BUSHENYI	-0.27
W	MASINDI	-0.26	W	RUKUNGIRI	-0.69	W	HOIMA	-0.43
W	RUKUNGIRI	-0.71	W	BUNDIBUGYO	-0.69	W	RUKUNGIRI	-0.73

Index A gives the four variables equal weight. Index B favors enrollment and untrained teachers, both variables which give priority to the more populous, better developed districts in the central and southern part of the country. Index C favors GER and female enrollment which gives priority to the less populous, less developed districts located in the North and the Northwest.

Discussions with the Ministry of Education focussed on the selection of 16 districts initially. Taking the top four districts from each region, as displayed in Table 2, produces a list of 16 selected according to the four variables which make up the index. Using these and other criteria the Ministry came up with its own list of 16 districts, 11 of which were also on the list produced by Index B in Table 2. The combination of the two procedures helped to clarify the relative importance of different criteria and produced enough of a consensus to proceed to the next step — that of choosing a TTC within those districts.

II. CRITERIA FOR THE SELECTION OF TTCs FOR IMISS

The selection of TTCs also requires a combination of technical and non-technical criteria. The Ministry of Education must consider balance among the various religious founding bodies associated with the TTCs, ownership of land and buildings, and various historical factors. The technical criteria are derived from the goals of the IMISS model and relate to the suitability of the location for effectively providing support services to primary education in the district. The technical criteria are also based on the assumption that Uganda must rationalize the numbers and the location of these institutions on a national basis. Ultimately, the projected needs of primary education in Uganda could be adequately served by between 20 and 25 ESCs.

Table 3 uses the list of districts and TTCs drawn up by the Ministry of Education to rate the characteristics of each of the TTCs. Each TTC is scored on four characteristics: access, location in relationship to primary schools, suitability of the site, and condition of the buildings. For each characteristic the TTC is given a score ranging from 1 - excellent, to 5 - bad. Scores are based on discussion with several senior education officials who have direct personal experience with all the TTCs.

Access refers to ease of physical access to the TTCs. Where is the TTC located in relationship to a main, tarmac road? How far off a main road is it and what is the condition of that road. How good is access during the rainy season. A score of 1 means the TTC is on a main road, usually in a larger town or city. A score of 2 means it is located close to a main road with a good quality feeder road.

Location refers to its location in relationship to the majority of primary schools which it would be expected to support. Thus centrality and ease of access to the roads which lead to primary schools is of importance. If the data were available this measure would be based on the average distance of the TTC from all the primary schools in its district. The higher the score, the further the TTC is located from most of the primary schools.

The rating of the Site has to do with its size, the room for expansion, access to water and electricity and ownership of land and buildings. All of these are factors to be considered when substantially rehabilitating or building a new ESC. The rating for buildings is a very rough judgement of the general condition of the buildings. In a number of cases a rating of 5 has been given, indicating that entirely new construction will be needed, sometimes on a new site as well.

Using the ratings for access and location, an index has been compiled by adding the scores on these two characteristics. (The characteristics of site and buildings were not used because they are less reliable and because a low score may not rule out that TTC as for IMISS.) The index values in Table 3 range from 2 to 8.5, and have been sorted from the lowest and most desirable to the highest and least appropriate. The comments indicate some specific details or suggest alternate existing TTCs which might better be chosen.

TABLE 3 - INITIAL MOE LIST OF TTCS FOR IDA V
(Sorted by Index Score)

TTC	DISTRICT	RGW	ACCESS	LCTN	SITE	BLDGS	INDEX	COMMENTS
1 KITGUM	KITGUM	N	1	1	2	5	2	No bldgs? Good site
2 DUHAGA	HOIMA	W	1	1	5	5	2	Needs new site
3 RUKUNGIRI	RUKUNGIRI	W	2	1	3	2	3	Close to Kitabi?
4 KABUKUNGE	MASAKA	C	2	2	2	2	4	Muslim
5 HULANDA	TORORO	E	2.5	1.5	2.5	3	4	Shares facilities, has 2 new buildings
6 KITABI	BUSHENYI	W	2	2.5	2	3	4.5	Out of town, off main road.
7 BUKEDEA	KUHI	E	2	2.5	2	3	4.5	What about Ngoras?
8 BUKINDA	KABALE	W	2.5	2	4.5	5	4.5	Needs site btwn Kisoro & Kabale. High demand dist.
9 KABERAMAIDO	SOROTI	E	2	3	2	5	5	Soroti TTC better location. Sharing site, not good
10 ABILONINO	APAC	N	3	2	2	3	5	30 miles from Boroboro in Lira
11 LODONGA	ARUA	N	2	3.5	2	2	5.5	Use Arua. most schs central, 50 miles away.
12 NDEJJE	LUWEERO	C	2.5	3.5	4	4	6	Luteete better, Church taking for University
13 KALIRO	KAMULI	E	2	4	2	3	6	Kamuli much better, In corner, close to Kaliro NTC
14 CANON APOLO	KABAROLE	W	3	3.5	3	2.5	6.5	Kinyamasika much better
15 HAZIGO	MUKONO	C	3	4	4	4	7	Why not Hkikonjeru? Close to Alemere
16 ALEMERE	LIRA	N	4	4.5	2	3	8.5	Use Boroboro, Very bad location, Near Alo? dre

Discussions about this list and more detailed analysis of the location of primary schools by sub-district showed that a number of these TTCs were poor choices on technical grounds, particularly if it is assumed that other TTCs in the district will be gradually phased out. Changes on technical grounds were suggested for the following TTCs: Arua to replace Lodonga, Kinyamasika to replace Canon Apolo, Boroboro to replace Alemere, Luteete to replace Ndejje, Kamuli to replace Kaliro (or perhaps choose Bishop Willis in Iganga to serve both Kamuli and Iganga districts.) In most cases the reason for the suggested change was the poor location of the TTC in relationship to the majority of the primary schools in the district or catchment area.

This process of careful analysis should be carried out on a national level, since decisions in one district must take into account services in neighboring districts. Attention should also be paid to the location of other major educational institutions like the NTCs. Some thought needs to be given as well to ease of access to the DEO's office and other services which support schools.

III. COMBINING DISTRICT AND TTC CRITERIA

To arrive at a working, prioritized list for IDA V, scores for the selection of districts (Table 2) and those for TTCs (Table 3) were combined into a common index. To facilitate combination, the index for the TTCs from Table 3 was converted to normalized scores and then using a set of weights was combined with Index B from Table 2. A weighting of 0.6 was given to the district score and a weighting of 0.4 to the TTC score. The resulting combined score is shown in the last column of Table 5 labelled "TOTAL ZSCORE." This score gives a small additional weighting to the districts scores over the scores which reflect the access and location of the TTCs within the districts.

Several high priority districts are ranked low on the combined scores because of the characteristics of the TTC chosen. Rethinking the choice of TTC could substantially alter the ranking of that district on the overall list. Two which are particularly noticeable in this regard are Mukono and Apac both of which were ranked first or second in their region on the district criteria, but are pulled down by the poor choice of TTC within the district.

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IMISS ORGANIZATION AND STRUCTURE

This annex along with its accompanying tables provides a description of the Organization proposed for the Integrated Management and Instructional Support System (IMISS). The organization has three levels: national, district — with the Educational Service Colleges (ESCs), and the local — coordinating schools and their associated outreach schools. At each level there is an IMISS structure whose functions reflect the expanded and integrated support role which is at the core of the IMISS concept. TTCs become IMISS Colleges with responsibility for delivering the full range of inputs needed for strong, quality primary education.

The changes in the existing organizations which will be necessary to implement IMISS include enabling legislation, institutional charters and staffing establishments for most of the affected institutions. Laying the groundwork for these changes will be an important part of the activities under the PPF prior to implementation of IDA V. Selection of key personnel for the national level structure will provide the staff necessary for the longer process of refining plans for district and local level implementation.

I. NATIONAL LEVEL IMISS ORGANIZATION

1. IMISS Management Committee

- Membership: Permanent Secretary of Education, the two Commissioners of Education, the TE and PE officers from both Administration and the Inspectorate, and the National IMISS Coordinator. (Total of 8 people)
- Functions: Executive policy making body. Sets major policies for implementation of IMISS, approves major personnel appointments, resolves problems, assigns responsibility for tasks to PIU or other parts of MOE as appropriate.
- Schedule: Meets as needed. Probably weekly during start-up phase of IMISS.

2. IMISS Advisory Committee

- Purpose: A body which allows relevant agencies and organizations to have input into the IMISS process. The committee is advisory to the Permanent Secretary of Education.
- Membership: The two Commissioners of Education, Representatives from ITEK, NCDC, Association of TTC Principals, Association of NTC Directors, Planning Unit/Education, Teacher Service Commission, Ministry of Local Government. National Coordinator serves a chairperson of the committee? (Or one of the Commissioners?) (10-12)
- Functions: Serves as forum for informing about goals and implementation of IMISS. Provides vehicle for input from various concerned bodies whose functions are influenced by IMISS. Generates support and assistance for IMISS as appropriate.

3. PIU - IMISS Unit

- Purpose: The unit responsible for implementing the IMISS program at national level and directing and supporting implementation at the district and local levels.
- Membership: Headed by the National IMISS Coordinator. The coordinator reports to the Management Committee for guidance on policy and major decisions and has access to the PS/MOE through the head of the PIU for more regular or urgent decisions. IMISS PIU unit is staffed by IMISS staff or by drawing upon staff from functional sections of the PIU for services in such areas as construction, procurement, finance and text-book distribution. Depending on extent of services needed, functional section staff may be assigned full or part time to IMISS tasks. (9 officers including the national coordinator — plus associated staff from the functional sections of PIU)

IMISS National Coordinator

The National Coordinator is the key person whose abilities will determine the success or failure of the entire IMISS strategy. This role must provide the leadership, the initiative, the motivational inspiration, and above all the managerial ability for the IMISS enterprise. It is critical that this post be filled by someone of exceptional capability. The person need not be an educator, although if all the other abilities can be found in an experienced educator that would be ideal. However, the search should seek out the leadership and managerial capability above all else. Salary and allowances should be sufficient to attract such a person.

- IMISS Unit**
- a) **Construction** - Oversee all aspects of construction of Educational Service Colleges, coordinating and outreach primary schools.
 - b) **Procurement** - Responsible for all procurement as needed for construction, instructional materials, vehicles, training and textbooks.
 - c) **Financial Management** - Responsible for all IMISS finances and accounting, including setting up district-level procedures, training staff and monitoring expenditures under IMISS.
 - d) **Textbook Distribution** - Oversees storage, transport and distribution of textbooks and centrally purchased learning materials to districts. Assists and monitors distribution within districts through Education Service Colleges in IMISS districts and through DEOs(?) in non-IMISS districts.
 - e) **Management Training & Structure** - (i) **Training Officer**: Design and implementation of the program for in-service training of school heads & other local education officials, and training the management trainers (Heads of Management Training Departments) for the district ESCs (ii) **Establishments Officer**: Reviews and nominates personnel (to national coordinator & head of PIU) for key positions at both national and district level of IMISS, manages process of revising legislation, legal charters, and staff establishment schedules, and pay and allowance structures as required by new IMISS structure at district and local levels. (Total of 2 officers)
 - f) **Pre- & In-Service Teacher Education** - Organizes in-service upgrading course (e.g. using MITEP model), helps ESCs establish functional linkages between pre- and in-service programs, works with ESCs to design in-service support materials, procedures, and staff. Each officer will have responsibility for 3 or 4 districts. (3 officers)
 - g) **Curriculum and Instructional Materials** - Supervises and assists in training staff, creating methods, and curriculum and materials development for IMISS. Finds and distributes Grade III curriculum and materials, primary curriculum & teaching syllabi and supporting materials, and outreach materials. Trains staff at all levels to use in support of various outreach activities. (1 officer)
 - h) **IMISS Outreach Program** - Works with ESCs to design and manage the new integrated outreach approach of IMISS. Designs and does staff training for directors and senior staff at ESCs and helps with creating effective management strategies for ESCs and district outreach - including scheduling procedures. Helps with Liaison with Agriculture, Health and Local government as needed. (1 officer)
 - i) **Monitoring and Evaluation** - Designs and carries out formative evaluation of IMISS approach; disseminates results to colleagues in IMISS team and ESCs; trains ESC staff in monitoring; designs & supervises required evaluation activities. (1 officer)

II. DISTRICT LEVEL IMISS STRUCTURE

In the IMISS districts a centrally located, former TTC will be converted into an Educational Service College (ESC) whose function is to provide a complete range of inputs and support to primary education in the district.

1. Director, Educational Services College

This is a new post which has been upgraded from the former post of Principal for the pre-service TTCs and will require changes in the establishment. The director must have a degree of autonomy in running the ESC with regard to both finances and decisions affecting the support of primary education in the district. The director is responsible for managing the full range of outreach and support functions of the ESC in addition to the pre-service training component. The director requires substantially more managerial and communications capability than was demanded of a TTC principal. These positions are critical to the success of IMISS and must be chosen with great care. Salary and benefits should be commensurate with their responsibilities.

2. ESC Consultative Board

- Purpose:** This board replaces the former Board of Governors structure of TTCs and has an advisory rather than a supervisory role.
- Membership:** Its membership should be reflective of various groups in the district, not just the local community. Included would be representatives of teachers' organizations, PTAs, the RC, school headmasters, and community leaders. Changes in the legal charter of the TTC will be needed to implement this new structure. (8-10 members)
- Functions:** The Board advises on policy and implementation, and has a public relations functions to inform the district and its people about the role of the ESC. It also serves as a forum for voicing concerns about the functioning of IMISS in the district.

2. District Inspector

Integrating the inspectorate at the district level into the ESC organization is an important part of the concept of IMISS. By linking the inspectorate's responsibility for overseeing quality and proper functioning of schools at the classroom level with the major institution charged with delivering those services, both functions can be strengthened. Current thinking suggests that the District Inspector (DI) should be advisory to the Director of the ESC, linked on the organizational chart by a dotted line to the Director. The DI would be based at the ESC and would make use the various delivery mechanisms to carry out the role of supervision of quality.

Assistant inspectors would be located in the Department of In-service Teacher Education, but would also report to the DI when carrying out their supervisory and quality monitoring functions. When engaged in professional development activities they would be responsible to the Head of the In-service Teacher Education department of the ESC.

3. Deputy Directors

Deputy Director for Residential Programs

This officer has responsibility for all activities which use the ESC facilities. The following Heads of Departments report to this deputy:

- a) Principal of the Demonstration Primary School (1)
- b) Head of Instructional Materials Development (1)
- c) Head of Pedagogy (1)

- d) Assistant in charge of the pre-service timetable and scheduling and use of ESC facilities — including conferences, training workshops, and various educational activities for the surrounding community, such as literacy classes. (1)

Deputy Director for Outreach Programs

This officer is responsible for all outreach and primary school support activities provided through the ESC. The following Heads of Departments report to this Deputy:

- a) Head of In-Service Teacher Education (both upgrading and continuous in-service) (1)
- b) Head of Management Training and Support (1)
- c) Head of Textbook and Materials Distribution (1)
- d) Assistant in charge of scheduling outreach activities including transportation and drivers. Assists Coordinating School Outreach Officers in scheduling. (1)

4. Heads of Departments and Department Staff

The current structure envisions six Heads of Departments, including the Principal of the Demonstration School. While each Head of Department reports to one Deputy Director, they are intended to work together closely on most program activities. For instance, tutors who formerly were exclusively engaged in pre-service education will be expected to spend significant time (encouraged by appropriate allowance structures) on in-service education in the coordinating schools. Practice teaching will be organized and supported by the outreach coordinator as part of the overall program of support for primary education. The Director and both Deputy Directors are charged with responsibility for seeing that all departments cooperate.

- a) Principal of Demonstration School - Manages school and liaison with the ESC in support of both pre- and in-service education programs. The demonstration school may well serve as model coordinating school in some settings. (1)
- b) Head of Instructional Materials Development and Production - Manages Educational Resource Center, trains tutors and teachers in educational materials production and supports workshops in coordinating schools. May have additional staff such as a writing specialist for English or vernacular languages, or an additional trainer. (1)
- c) Head of Pedagogy - Supervises the seven traditional subject, or their equivalent, heads: Foundations, Language, Maths, Science, Social Studies, Home Economics, Arts & Crafts. They will support both pre- and in-service instruction in their subjects. Overall responsibility for the pre-service training program. (1)
- d) Head of In-service Teacher Education - Supervises program with three components: the in-service upgrading program, all continuous in-service support programs, and the supervision of curriculum and instruction in schools (inspectorate function). Has nine subordinate staff members (some of whom are the assistant inspectors assigned to the district), three in each of the above areas of responsibility. Three of these officers have responsibility for liaison with the coordinating school outreach officers to insure scheduling and resource use at the coordinating school level is managed smoothly. The exact number of these staff will vary somewhat depending on the number of primary schools in the district. (1) + (9)
- e) Head of Management Training - Supervises all management training in the district for school heads, deputy heads, coordinating school outreach officers, PTA heads, local government and community leaders. Assists PIU monitoring officer in assessing progress and identifying problems in the implementation of the IMISS model within the district. (1) + (1)

- f) Head of Distribution - Supervises one learning materials distribution officer with responsibility for distribution of all centrally provided textbooks and instructional materials to the schools in the ESC catchment area. Also supervises one zonal engineer responsible for both technical support and distribution of all centrally provided construction materials. The construction process makes use of county, sub-county and school-level committees which mobilize community input to the construction. (1) + (2).

III. COORDINATING SCHOOL LEVEL

Each ESC district/catchment area will contain a carefully planned network of coordinating schools, each with its associated outreach schools. The number of coordinating schools will vary, from perhaps 15 to 30, according to the number and the distribution of schools in the district. The number of associated outreach schools will vary from six to fifteen, again depending on the distribution of schools and the local geography and transport patterns. The coordinating school will be selected for its central location, accessibility and space for several additional buildings. The school should be a complete school with all seven standards. The coordinating school will serve as a location for the gathering of teachers from the outreach schools for structured in-service courses, for meetings of those doing the upgrading course, for production of instructional materials, for informal sharing and mutual assistance. Coordinating schools also provide a framework for more efficient and effective supervision of teaching practice for students in the pre-service course.

1. Coordinating School Head

Heads of coordinating schools should be carefully selected. They should be experienced teachers and have demonstrated reasonable management capabilities. They should also be strong supporters of the in-service function of the coordinating school.

2. Coordinating School Outreach Officer

The Outreach Officers should have the status of a deputy head with responsibility for all outreach to the associated outreach schools and for liaison with the supporting ESC. These officers should be experienced primary school teachers who also have demonstrated ability to manage resources and to counsel practicing teachers. The Outreach Officer will be responsible for scheduling the resource room and facilities at the coordinating school, for assessing needs and wants of teachers in the outreach schools, and for communicating information about various programs originating in the ESC.

3. School In-service Leader

Each school will have an experienced teacher - in some cases the head teacher - designated as the lead teacher. That person will have responsibility for assisting the Outreach Officer in the coordinating school to communicate with teachers in the school and to organize teachers for various in-service activities when appropriate. The in-service leaders are the bottom link in the hierarchy of support for primary education. They may well be the members of an association based at the Outreach School which helps to manage all activities of that group of schools.

NATIONAL LEVEL IMISS ORGANIZATION

1. IMISS Management Committee

- Membership: Permanent Secretary of Education, the two Commissioners of Education, the TE and PE officers from both Administration and the Inspectorate, and the National IMISS Coordinator. (Total of 8 people)
- Functions: Executive policy making body. Set major policies for implementation of IMISS, approves major personnel appointments, resolves problems, assigns responsibility for tasks as needed.
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- Functions: Serves as forum for informing about goals and implementation of IMISS. Provides vehicle for input from various concerned bodies whose functions are influenced by IMISS. Generates support and assistance for IMISS as appropriate.

3. PIU - IMISS Unit

- Purpose: The national body responsible for implementing entire IMISS program at national level and directing and supporting implementation at the district and local levels.
- Membership: Headed by the National IMISS Coordinator. The coordinator reports to the Management Committee for guidance on policy and major decisions and has access to the PS/MOE through the head of the PIU for more regular or urgent decisions. IMISS PIU unit is staffed by IMISS staff or by drawing upon staff from functional sections of the PIU for services in such functional areas as construction, procurement, finance and textbook distribution. Depending on extent of services needed, the functional section staff may be assigned full or part time to IMISS tasks. (9 officers including the national coordinator. Uses services of 7 or 8? more from functional sections of PIU)
- @ Functions:
- Construction - Oversee all aspects of construction of Educational Service Colleges, coordinating and primary schools.
 - Procurement - Responsible for all procurement as needed for construction, instructional materials, vehicles, training, etc.

- c) Financial Management - Responsible for all IMISS finances and accounting, including setting up district-level procedures, training staff and monitoring expenditures under IMISS.
- d) Textbook Distribution - Oversees storage, transport and distribution of textbooks and centrally purchased learning materials to districts. Assists and monitors distribution within districts through Education Service Colleges (ESC) in IMISS districts and through DEOs in non-IMISS districts?
- e) Management Training & Structure - (i) Training Officer: Design and implementation of the program for in-service training of school heads & other local education officials, and training the management trainers (Heads of Management Training Departments) for the district ESCs (former TTCS) (ii) Establishments Officer: Reviews and nominates personnel for key positions at both national and district level of IMISS, manages process of revising legislation, legal charters, and staff establishment schedules, and pay and allowance structures as required by new IMISS structure at district and local levels. (Total of 2 officers)
- f) Pre- & In-Service Teacher Education - Organizes in-service upgrading course (e.g. using MITEP model), helps ESCs establish functional linkages between pre- and in-service programs, works with ESCs to design in-service support materials, procedures, and staff. Each officer will have responsibility for 3 or 4 districts. (3 officers)
- g) Curriculum and Instructional Materials - Supervises and assists in training staff, creating methods, and locating process of curriculum and materials development for IMISS. Finds, distributes, and trains staff to use Grade III curriculum and materials, new primary curriculum developments, and outreach materials in support of various outreach activities. (1 officer)
- h) IMISS Outreach Program - Works with ESCs to design and manage the new integrated outreach approach of IMISS. Designs and does staff training for directors and senior staff at ESCs and helps with creating effective management strategies for ESCs and district outreach - including scheduling procedures. Helps with Liaison with Agriculture, Health and Local government as needed. (1 officer)
- i) Monitoring and Evaluation - Designs and carries out formative evaluation of IMISS approach; disseminates to colleagues in IMISS team and ESCs; trains ESC staff in monitoring; designs & supervises required evaluation activities. (1 officer)

DISTRICT LEVEL IMISS STRUCTURE

In the IMISS districts a centrally located, former TTC will be converted into an Educational Service College (ESC) whose function is to provide a complete range of inputs and support to primary education in the district.

1. ECS Director

This is a new post requiring changes in the establishment. The director is responsible for managing the full range of outreach and support functions of the ESC in addition to the pre-service training component. The director requires substantially more managerial and communications capability than was demanded of a TTC principal. These positions are critical to the success of IMISS and must be chosen with great care. Salary and benefits should be commensurate with their responsibilities.

2. ESC Consultative Board

- Purpose:** This board replaces the former Board of Governors structure of TTCs and has an advisory rather than a supervisory role.
- Membership:** Its membership should be reflective of various groups in the district, not just the local community. Included would be representatives of teachers' organizations, PTAs, the RC, school headmasters, and community leaders. Changes in the legal charter of the TTC will be needed to implement this new structure. (8-10 members)
- Functions:** The Board advises on policy and implementation, and functions as a conduit for information about the role of ESC to the district. It also serves as a forum for voicing concerns about the functioning of IMISS in the district.

3. Deputy Directors

Deputy Director for Residential Programs:

This officer has responsibility for all activities which use the ESC facilities. The following Heads of Departments report to this deputy:

- a) Principal of the Demonstration Primary School (1)
- b) Head of Instructional Materials Development (1)
- c) Head of Pedagogy (1)
- d) Assistant in charge of the pre-service timetable and scheduling and use of ESC facilities — including conferences, training workshops, and as a location of various education activities for the surrounding community. (1)

Deputy Director for Outreach Programs:

This officer is responsible for all outreach and primary school support activities provided through the ESC. The following Heads of Departments report to this Deputy:

- a) Head of In-Service Teacher Education (both upgrading and ongoing in-service) (1)
- b) Head of Management Training and Support (1)
- c) Head of Textbook and Materials Distribution (1)
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4. Heads of Departments and Department Staff

The current structure envisions six Heads of Departments, including the principal of the demonstration school. While each Head of Department reports to one Deputy Director, they are intended to work together closely on most program activities. For instance, tutors who formerly were exclusively engaged in pre-service education will be expected to spend significant time (encouraged by appropriate allowance structures) on in-service education in the coordinating schools. Practice teaching will be organized and supported by the outreach coordinator as part of the overall program of support for primary education. The Director and both Deputy Directors are charged with responsibility for seeing that all departments cooperate and support each others needs.

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- c) Head of Pedagogy - Supervises the seven traditional subject heads (Foundations, Language, Maths, Science, Social Studies, Home Economics, Arts & Crafts) who will support both pre- and in-service instruction in their subjects. Overall responsibility for the pre-service curriculum and its implementation. (1)
- d) Head of In-service Teacher Education - In charge of the in-service upgrading program, all continuous in-service support programs, and the supervision of curriculum and instruction in schools (inspectorate function). Has nine subordinate staff members, three in each of the above areas of responsibility. Three of these officers have responsibility for liaison with the coordinating school officers to insure scheduling and resource use at the coordinating school level is managed smoothly. The exact number of these staff will vary somewhat depending on the number of primary schools in the district. (1) + (9)
- e) Head of Management Training - Supervises all management training in the district for school headmasters, coordinating school officers, PTA heads, local government and community leaders. Assists PIU monitoring officer in assessing progress and identifying problems in the implementation of the IMISS model within the district. (1) + (1).
- f) Head of Distribution - Supervises one learning materials distribution officer with responsibility for distribution of all centrally provided textbooks and instructional materials to the schools in the district network. Also supervises one district engineer responsible for both technical support and distribution of all centrally provided construction materials. The construction process makes use of county, sub-county and school-level committees which mobilize com-

munity input to the construction. (1) + (2).

COORDINATING SCHOOL LEVEL

Each district will contain a carefully planned network of coordinating schools, each with its associated outreach schools. The number of coordinating schools will vary according to the number and the distribution of schools in the district. The number of coordinating schools will vary from about 15 to 25. The number of associated schools will vary from six to fifteen, again depending on the distribution of schools and the local geography and transport patterns. The coordinating school will be selected for its central location, accessibility and space for several additional buildings. The school should be a complete school with all seven standards. The coordinating school will serve as a location for the gathering of teachers from the outreach schools for structured in-service courses, for meetings of those doing the upgrading course, and for informal sharing, production of instructional materials and mutual assistance. Coordinating schools also provide a framework for more efficient and effective supervision of teaching practice for students in the pre-service course.

1. Coordinating School Head

Heads of coordinating schools should be carefully selected. They should be experienced teachers and have demonstrated reasonable management capabilities. They should also be strong supporters of the in-service function of the coordinating school.

2. Coordinating School Outreach Officer

3. School In-service Leader

Presented to USAID/Kampala
by Robin Horn AFR/TR/EHR
May 3, 1991

Suggested Pre-PAAD Studies in Basic Education in Uganda

Study A: Baseline Educational Achievement Assessment

Rationale

Despite the intense interest in primary education and the widespread concern over the deteriorating or deteriorated conditions of primary schooling in Uganda, little is known the level of literacy, numeracy, and problem solving skills acquired by young Ugandan school children at various points in their schooling cycle. Moreover, none of the preinvestment studies being conducted or planned with IDA 4 proceeds attempt to ascertain student achievement.

There are several reasons why it is important to undertake a baseline study of student learning, and why this need to be done as soon as possible.

(a) There is only one existing national examination for primary school children that attempts to measure learning achievement, the primary leaving examination (PLE). USAID and Bank analysts have been very critical of this examination, claiming that it does not adequately measure the acquisition of basic skills, functional and practical literacy, numeracy, and problem solving. Another problem with the PLE is that a very large number of primary school entrants do not sit for this examination. Reasons why children do not take this exam include;

- o dropping out before completing the final year of the cycle;
- o examination sitting fees;
- o children feel unprepared--expecting to do poorly;
- o parents cannot afford tutoring costs in preparation for the examination;
- o children fall ill on examination date.

(b) Before redesigning the curriculum and syllabus, and restructuring instruction and educational programs throughout the primary cycle, it is important to understand what the current system is capable of producing (that is, what children achieve under current circumstances).

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- o First, we need to know what level of functional, practical literacy, numeracy, and problem solving skills children develop by then end of the primary cycle (at present, primary grade 7). This will allow us to estimate the correlation between (i) primary grade 7 completion, (2) PLE test results, and (3) literacy, numeracy, and problem solving skill development.
- o Second, we need to measure the level of learning at a lower grade level, before significant dropout occurs, and while sufficient years in the cycle remain to improve the learning of those below some threshold. Primary grade 4 would be good choice because four years of school is widely believed to be the minimum required to establish sustainable literacy and numeracy.
- o Third, we need to obtain a better understanding of the relationship between age, incidence, timing, and frequency of repetition, and the acquisition of skills and knowledge. This is important to obtaining a better grasp of efficiency and quality issues.

Methodology

With little doubt, the best way to undertake a study of the type we are proposing here is to examine children's learning using a national probability sample, or, to limit costs, time, and implementation problems, a probability sample in several selected districts. Ideally, we would want to develop an instrument specifically relevant to Uganda. However, there are a number of well designed, well tested instruments that are available and that have been used in African settings.¹ USAID could conduct an assessment, assuming government clearances and facilitation, from start to finish within one year, and possibly within 6 months.

Cost

A national or quasi-national assessment of educational

¹The mathematics instrument developed by ETS/Princeton for the International Assessment of Educational Achievement, for example, has been successfully used in a number of developing countries around the world.

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achievement at P4 and P7 would require foreign consultants, local consultants, data processing equipment, local transportation, international transportation, and printed materials. Table 1 provides an initial set of estimates of the total cost, assuming a sample is surveyed in three to six districts only.

Table 1: Estimated Study Costs for Study A			
Resource	Units	Cost per Unit	Total Cost
2 Foreign consultants	4 person months each	\$ 6000 per person month	\$48,000
2 Local Consultants	4 person months each	\$ 3000 per person month	\$24,000
2 RT Transport from U.S.	1 trip each	\$ 5000 per trip	\$10,000
Local Transport	2 vehicles, 4WD, 2 months	\$ 2000 per month each	\$8,000
Per diem for all 4 staff	30 days per month, 4 staff	\$ 125 per day (avg urb/rur)	\$60,000
Printing	1000 6 page test booklets	\$1 per booklet	\$1,000
Lease Computer and Software	2 386sx 40MB laptops & SW	\$ 1000 each inclusive	\$2,000
Total			\$153,000

Study B: Estimating the total costs and the sources of finances for public primary schools in Uganda

Rationale

The USAID/Uganda 1990 Sector Study suggested that public primary schools in Uganda are financed mostly by parents. The figure cited there is that 90 percent of the operational costs of schools (including especially teacher salary topping up) are financed by PTA contributions and community contributions. Many other studies of primary education in Uganda conducted during the past 5 years draw the same conclusion. Unfortunately, there are no empirical studies that provide evidence to support this 90 percent figure nor any other figure regarding the real private contributions to the costs of school operations.

This lack of information should be of tremendous concern to the GOU since there are a number of proposals put

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forward by the Education Policy Review Commission, the White Paper, and the Five Year Investment Plan, which are designed to increase resources to the schools and to reduce barriers to access.. Without a clearer understanding of what it currently costs to run a school and how these costs are paid, the net results of interventions designed to raise the level of resources available to run schools or to reduce barriers to access will have to remain in doubt.²

The kinds of questions to which we need answers include:

- o What are teachers actually earning through parent, PTA, and other salary and in-kind supplementations?
- o Do different teachers (at different levels) in the same school earn different amounts? If so, why?
- o What are the relationships between teacher certification, teacher years of experience, and teacher gender on the one hand, and total teacher earnings from all sources on the other hand?
- o What are head teachers earning from all sources?
- o What factors affect head teacher earnings in different schools?
- o What is the relationship between total school costs on the one hand and the proportion of students sitting and passing the PLE or acquiring functional literacy, numeracy, and problem solving skills (see Study 1, above) on the other hand?

Related to the need to gain a better understanding of the full costs of school operations and the sources of these finances is the need to understand the relationships between the PTA, the school management committee, and the total level of resources mobilized from parents and the community for primary school operations (including maintenance). Moreover, since PTAs and parents are paying so much of the costs, we would want to know how teachers and headmasters are accountable to them and

²A similar lack of information regarding local financing and support for school construction questions the decision to go ahead with a school construction project before more is known about these issues.

what is expected from teachers and headteachers in return. This study could also obtain answers to questions about the actual relationships and power issues as regards headteachers, school management committees, and parent teacher associations.³

Methodology

Various methodologies can be proposed for this study. As a first step, we should review the 1990(?) household expenditure survey to ascertain what the data in that survey can tell us regarding household budget allocations to schooling vis-a-vis other purchases. Methodology for this aspect of the study would consist of running tabulations off of the survey dataset.

A substantially more directed study would be needed, however, to obtain answers to the questions raised above. Most likely, a careful ethnographic study will be required. This study would mainly consist of data collected through highly structured but focused interviews with parents, teachers, headteachers, PTA leaders, and school management committee leaders in two to four districts. The study design would have to give careful attention to sampling, cross-checking, reinterviewing, etc., to assure maximum reliability and validity. Conceivably, all or a sample of all the parents from one to two classes in each sampled school would need to be interviewed.

An interesting and cost-saving opportunity would be to combine this study with study A. In this way, the same schools can be visited with substantial savings in sampling and time required for local site visits. More importantly, it would be possible to identify associations and relationships between levels and modes of school financing and student learning achievement. These combined data, even if derived from a limited sample of districts, would provide an excellent source of baseline data, not only for USAID's possible assistance effort, but for the entire reform and investment program.

Because of these expected returns, the additional costs associated with merging this study with study A are suggested in Table 2.

³Unfortunately, too few districts are likely to be surveyed to provide a sufficient sample size to ascertain information regarding the role of DEOs and their relationship to headteachers and the school organizations.

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Table 2: Estimated Additional Study Costs for Study B			
Resource	Units	Cost per Unit	Total Cost
2 Foreign consultants	4 person months each	\$ 6000 per person month	\$48,000
6 Local Consultants	4 person months each	\$ 3000 per person month	\$36,000
2 RT Transport from U.S.	1 trip each	\$ 5000 per trip	\$10,000
Per diem for all 8 staff	30 days per month, 8 staff	\$ 100 per day (avg urb/rur)	\$96,000
Printing & notebooks	1000 6 page test booklets	\$1 per booklet	\$1,000
Lease Computer and Software	2 386sx 40MB laptops & SW	\$ 2000 each inclusive	\$4,000
Total			\$195,000

Study C: MOE Management Audit and Work Practices Study

Rationale

Like many public institutions in Uganda, the Ministry of Education has experienced a tremendous increase in responsibility without a review and adjustment of structure and lines of authority, and without a corresponding increase in management training. There are a number of critical issues that only a thorough management audit can address. The two central ones are, how to institute internal incentives and accountability systems to improve performance given the inadequate level of civil service wages; and how to increase institutional efficiency given the bureaucratic inertia of such a tremendously large organization. These overarching issues should be so well analyzed that all other aspects of his study are related to them.

There are at least three specific components to this study. First, it is essential that the MOE clearly define and come to terms with its objectives, both at headquarters and in the district education offices. Second, there is a need to conduct an investigation of institutional responsibilities that focuses on practical ways for the MOE to achieve these objectives. Third, once these practical approaches for achieving MOE objectives are identified and assessed, we need a set of

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recommendations on how they can be supported by the institutions organizational structure, internal processes, and external accountability.

The goal of the management audit and work practices study should be a proposed set of implementable recommendations for a systematic overhaul of the Ministry, taking account of the central issues highlighted in the first paragraph. The driving force behind the study should be how the Ministry can be most effective in improving student learning, school effectiveness, and system efficiency and sustainability.

In addition to, or as intrinsic part of the overall purposes of the study, a number of specific questions need to be answered. They include:

- o What appointment and promotion criteria can most effectively motivate MOE staff given their poor terms and conditions of service?
- o How can work practices (i.e., attendance, punctuality, attention to detail, followthrough, taking responsibility) be improved under these circumstances?
- o What accountability mechanisms can work in this setting?
- o What communications channels between offices and between headquarters and the field exist and how can they be improved?
- o What strategies can be developed to most effectively utilize vehicles, manage supplies, manage and distribute payroll, and maintain facilities?

There are two offices in particular that warrant specific attention. The first is the Planning and Statistics Unit. The questions are the same for analyzing the functioning of this office as for the entire MOE, with the specific need to identify the most appropriate and realizable objectives for the unit. The second is the district education office, with specific attention to how its functions can most effectively raise student learning. Costing for this study has yet to be determined.

DEO

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APPENDIX VII

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APPENDIX VIII

ABBREVIATIONS AND ACRONYMS

ADB	African Development Bank
AEO	Assistant Education Officer
BED	Basic Education Database
BEIRD	Basic Education for Integrated Rural Development
BEND	Basic Education for National Development
CPSP	Country Program Strategic Plan
DA	District Administrator
DANIDA	Danish International Development Agency
DEC	District Education Committee
DEO	District Education Officer
DES	District Executive Secretary
DFC	District Finance Committee
EEC	European Economic Community
EPRC	Education Policy Review Commission
ERTV	Educational Radio and Television
ESC	Education Service Center
ESCP	Establishment Staffing Control Project
GDP	Gross Domestic Product
GOU	Government of Uganda
IDA	International Development Association (World Bank)
IMISS	Integrated Management and Institutional Support System
ITEK	Institute for Teacher Education at Kyambogo
MITEP	Mubende Intensive Teacher Education Project
MLG	Ministry of Local Government
MOE	Ministry of Education
MOF	Ministry of Finance
MOH	Ministry of Health
MPSCA	Ministry of Public Service and Cabinet Affairs
MPED	Ministry of Planning and Economic Development
NCDC	National Curriculum Development Center
NGO	Non-Governmental Organizations
NPA	Non-Project Assistance
NRM	National Resistance Movement
NTC	National Teachers College
NURP	Northern Uganda Redevelopment Project
ODA	Overseas Development Association
P1	Primary year 1
P7	Primary year 7
PAAD	Program Assistance Approval Document
PAIP	Program Assistance Initial Proposal
PAPSCA	Program for the Alleviation of Poverty and the Social Costs of Adjustment
PIU	Planning Implementation Unit
PLE	Primary Leaving Examination
PSC	Personal Services Contractor
PTA	Parent-Teachers' Association
PTTC	Primary Teachers Training College